

Docket:	:	<u>A.06-07-020</u>
Exhibit Number	:	<u> </u>
Commissioner	:	<u>John Bohn</u>
Admin. Law Judge	:	<u>Christine Walwyn</u>
DRA Project Mgr.	:	<u>Yoke Chan</u>



**DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION**

**REPORT ON THE
RESULTS OF OPERATIONS
IN OROVILLE DISTRICT
OF
CALIFORNIA WATER SERVICE COMPANY
Test Year 2007-2008 and
Escalation Years 2008-2009 and 2009-2010
Application 06-07-020**

For authority to increase water rates located in its
Oroville District serving portions of the City of
Oroville and vicinity, Butte County.

San Francisco, California
December 1, 2006

TABLE OF CONTENTS

1		
2	EXECUTIVE SUMMARY.....	IV
3	CHAPTER 1: OVERVIEW AND POLICY.....	1-1
4	A. INTRODUCTION.....	1-1
5	B. SUMMARY OF RECOMMENDATIONS	1-1
6	C. DISCUSSION	1-1
7	D. CONCLUSION	1-2
8	CHAPTER 2: WATER CONSUMPTION AND OPERATING REVENUES	2-1
9	A. INTRODUCTION.....	2-1
10	B. SUMMARY OF RECOMMENDATIONS	2-2
11	C. DISCUSSION	2-3
12	D. CONCLUSION	2-7
13	CHAPTER 3: OPERATIONS AND MAINTENANCE EXPENSES.	3-1
14	A. INTRODUCTION.....	3-1
15	B. SUMMARY OF RECOMMENDATIONS	3-2
16	C. DISCUSSION	3-3
17	D. CONCLUSION	3-14
18	CHAPTER 4: ADMINISTRATIVE & GENERAL EXPENSES	4-1
19	A. INTRODUCTION.....	4-1
20	B. SUMMARY OF RECOMMENDATIONS	4-1
21	C. DISCUSSION	4-1
22	D. CONCLUSION	4-3
23	CHAPTER 5: TAXES OTHER THAN INCOME	5-1
24	A. INTRODUCTION.....	5-1
25	B. SUMMARY OF RECOMMENDATIONS	5-1
26	C. CONCLUSION	5-1
27	CHAPTER 6: INCOME TAXES	6-1
28	A. INTRODUCTION.....	6-1
29	B. SUMMARY OF RECOMMENDATIONS	6-1
30	C. DISCUSSION	6-1

1	CHAPTER 7: PLANT IN SERVICE	7-1
2	A. INTRODUCTION.....	7-1
3	B. SUMMARY OF RECOMMENDATIONS	7-1
4	C. DISCUSSION	7-2
5	CHAPTER 8: DEPRECIATION EXPENSE AND RESERVE	8-1
6	A. INTRODUCTION.....	8-1
7	B. SUMMARY OF RECOMMENDATIONS	8-1
8	C. DISCUSSION	8-1
9	D. CONCLUSION	8-1
10	CHAPTER 9: RATE BASE AND NET TO GROSS MULTIPLIER.....	9-1
11	A. INTRODUCTION.....	9-1
12	B. SUMMARY OF RECOMMENDATIONS	9-1
13	C. DISCUSSION	9-2
14	CHAPTER 10: CUSTOMER SERVICE	10-1
15	A. INTRODUCTION.....	10-1
16	B. SUMMARY OF RECOMMENDATIONS	10-1
17	C. DISCUSSION	10-1
18	D. CONCLUSION	10-2
19	CHAPTER 11: RATE DESIGN	11-1
20	A. INTRODUCTION.....	11-1
21	B. SUMMARY OF RECOMMENDATIONS	11-1
22	C. DISCUSSION	11-2
23	D. CONCLUSION	11-2
24	CHAPTER 12: SPECIAL REQUESTS	12-1
25	A. INTRODUCTION.....	12-1
26	B. SUMMARY OF RECOMMENDATIONS	12-1
27	CHAPTER 13: STEP RATE INCREASE.....	13-1
28	A. FIRST ESCALATION YEAR	13-1
29	B. SECOND ESCALATION YEAR	13-1
30	C. ESCALATION YEARS INCREASES	13-1
31	APPENDIX A – QUALIFICATIONS AND PREPARED TESTIMONY	

1 **MEMORANDUM**

2

3 The Division of Ratepayer Advocates (“DRA”) of the California Public
4 Utilities Commission (“Commission”) prepared this report in the California Water
5 Service Company’s (“CWS”) rate case proceeding A.06-07-020. In this docket,
6 the Applicant requests an order for authorization to increase rates charged for
7 water service by \$ 1,000,500 or 40.6 % in fiscal year 2007-2008; by \$136,500 or
8 3.9% in fiscal year 2008-2009; and by \$136,500 or 3.8% in fiscal year 2009-2010
9 in its Oroville District service area. DRA presents its analysis and
10 recommendations associated with the Applicant’s request.

11 Yoke Chan serves as DRA’s project coordinator in this review and is
12 responsible for the overall coordination in the preparation of this report. DRA’s
13 witnesses’ prepared qualifications and testimony are contained in Appendix A of
14 this report.

15 DRA’s legal counsel for this case is Selina Shek.

16 DRA’s recommendation on Cost of Capital is discussed under separate
17 cover.

EXECUTIVE SUMMARY

CWS requests an increase of 40.6% in Test Year 2007-08 and 3.9% in Escalation Year 2008-09, whereas DRA recommends an increase of 22.8% in Test Year 2007-08 and inflationary increases for the escalation years.

Key Recommendations

DRA's recommendations are based lower estimates of Operation and Maintenance expenses (Chapter 3), lower expenses of Administrative and General expenses (Chapter 4), lower Plant additions (Chapter 7), a lower Cost of Capital of 9.54% and lower Rate of Return on Rate Base of 8.30% for 2007-2008 and 2008-2009 (Chapters 1 and 13).

In additions, DRA recommends the following treatment to CWS' Special Requests as discussed further in Chapter 12:

(a) Water Quality

CWS requests that the Commission make a finding that the district water quality meets all applicable state and federal drinking water standards and the provisions of General Order 103. DRA has reviewed CWS' filings and agrees that CWS has complied with applicable water quality standards during the most recent three-year period.

(b) Water Revenue Adjustment Mechanism

CWS requests a revenue adjustment mechanism that decouples sales and revenues. This will not be included in the scope of this proceeding.

1 (c) Filing an offset rate increase in 2008 to reflect the General
2 Office allocation adopted in CWS' 2007 GRC

3 CWS requests authorization to file an offset rate increase in 2008 to reflect
4 the general office allocation adopted in its 2007 general rate case filing. DRA
5 opposes CWS' request. This will not be included in the scope of this proceeding.

6 (d) Total Water Cost Balancing Account

7 CWS requests total water cost balancing account in this district. This will
8 not be included in the scope of this proceeding.

9 (e) To amortize all balancing and memorandum accounts

10 CWS requests authority to amortize all balancing and memorandum
11 account balances in this district. DRA agrees that all balancing and memorandum
12 accounts should be amortized.

List of DRA Witnesses and Respective Chapters

Chapter Number	Description	Witness
-	Executive Summary	
1	Overview and Policy Introduction and Summary of Earnings	Yoke Chan
2	Water Consumption and Operating Revenues	Toni Canova
3	Operation and Maintenance Expenses	Vibert Greene
4	Administrative and General Expenses	Cleason Willis
5	Taxes Other Than Income	Cleason Willis
6	Income Taxes	Vibert Greene
7	Plant in Service	Joyce Steingass
8	Depreciation Expenses and Reserve	Joyce Steingass
9	Rate Base & Net to Gross Multiplier	Joyce Steingass
10	Customer Service	Katie Liu
11	Rate Design	Tatiana Olea
12	Special Requests	Steingass, Chan
13	Escalation Year Increases	Yoke Chan

1 **CHAPTER 1: OVERVIEW AND POLICY**

2 **A. INTRODUCTION**

3 This report sets forth the analysis and recommendations of DRA pertaining
4 to A. 06-07-020, CWS' general rate increase request for Test Year 2007-2008 and
5 Escalation Years 2008-2009 and 2009-2010.

6 **B. SUMMARY OF RECOMMENDATIONS**

7 Tables 1-1 through 1-3 of the Summary of Earnings compare the results of
8 operations for the Test Year 2007-2008 including revenues, expenses, taxes and
9 ratebase.

10 **C. DISCUSSION**

11 The total revenues requested by CWS are as follows:

12	<u>Year</u>	<u>Amount of Increase</u>	<u>Percent</u>
13	2007-2008	\$ 1,000,500	40.6%
14	2008-2009	\$ 136,500	3.9%
15	2009-2010	\$ 136,500	3.8%

16 CWS estimates that its proposed rates in the application will produce
17 revenues providing the following returns:

18	<u>Year</u>	<u>Return on Rate Base</u>	<u>Return on Equity</u>
19	2007-2008	9.89%	12.37%
20	2008-2009	9.89%	12.37%
21	2009-2010	9.89%	12.37%

1 **D. CONCLUSION**

2 DRA recommends revenue increase for the test year as follows (Escalation
3 Years 2008-2009 and 2009-2010 are covered in Chapter 13):

4	<u>Year</u>	<u>Amount of Increase</u>	<u>Percent</u>
5	2007-08	\$562.8	22.8%

6 The last general rate increase for CWS was authorized by D. 04-04-041 in
7 Application A. 03-01-034 resulting in a rate of return on rate base of 8.60% in
8 2004. Present Rates used by DRA in this report are based on Advice Letter 1753,
9 which became effective January 1, 2006 as authorized by D. 04-04-041.

10 A comparison of DRA's and CWS' estimates for rate of return on rate base
11 for the Test Year 2007-2008 and Escalation Year at the present and the utility's
12 proposed rates is shown below:

13	RATE OF RETURN						
14		<u>DRA</u>		<u>CWS</u>		<u>Diff</u>	
15		<u>2007-08</u>	<u>2008-09</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2007-08</u>	<u>2008-09</u>
16	Present Rates	3.59 %	3.63%	2.52%	1.73%	-1.07%	-1.90%
17	Proposed Rates	12.06%	13.49%	9.89%	9.89%	-2.17%	-3.60%

TABLE 1-1
CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2007 - 2008

(AT PRESENT RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	2,463.8	2,463.8	0.0	0.0%
Operating expenses:				
Operation & Maintenance	1,087.8	1,116.3	28.4	2.6%
Administrative & General	153.9	159.4	5.5	3.6%
G. O. Prorated Expense	472.0	498.4	26.4	5.6%
Dep'n & Amortization	320.7	336.6	15.9	5.0%
Taxes other than income	99.9	111.0	11.1	11.1%
State Corp. Franchise Tax	13.0	3.0	(9.9)	-76.6%
Federal Income Tax	77.6	45.1	(32.6)	-41.9%
Total operating exp.	2,224.9	2,269.8	44.8	2.0%
Net operating revenue	238.9	194.0	(44.8)	-18.8%
Rate base	6,659.6	7,704.6	1,045.0	15.7%
Return on rate base	3.59%	2.52%	-1.07%	-29.8%

TABLE 1-2
CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2007 - 2008

(AT UTILITY PROPOSED RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA Amount	%
(Thousands of \$)				
Operating revenues	3,464.6	3,464.4	(0.2)	0.0%
Operating expenses:				
Operation & Maintenance	1,094.8	1,123.2	28.4	2.6%
Administrative & General	153.9	159.4	5.5	3.6%
G. O. Prorated Expense	472.0	498.4	26.4	5.6%
Dep'n & Amortization	320.7	336.6	15.9	5.0%
Taxes other than income	99.9	111.0	11.1	11.1%
State Corp. Franchise Tax	100.8	90.9	(9.9)	-9.9%
Federal Income Tax	419.2	382.8	(36.4)	-8.7%
Total operating exp.	2,661.3	2,702.3	41.0	1.5%
Net operating revenue	803.3	762.1	(41.2)	-5.1%
Rate base	6,659.6	7,704.6	1,045.0	15.7%
Return on rate base	12.06%	9.89%	-2.17%	-18.0%

TABLE 1-3

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2007 - 2008

(DRA ESTIMATES)

Item	DRA Est. @ Present Rates	@ Rates Proposed by DRA	Proposed Exceeds Present Amount	%
(Thousands of \$)				
Operating revenues	2,463.8	3,026.6	562.8	22.8%
Operating expenses:				
Operation & Maintenance	1,087.8	1,091.8	3.9	0.4%
Administrative & General	153.9	153.9	0.0	0.0%
G. O. Prorated Expense	472.0	472.0	0.0	0.0%
Dep'n & Amortization	320.7	320.7	0.0	0.0%
Taxes other than income	99.9	99.9	0.0	0.0%
State Corp. Franchise Tax	13.0	62.4	49.4	381.2%
Federal Income Tax	77.6	273.3	195.6	252.0%
Total operating exp.	2,224.9	2,473.9	248.9	11.2%
Net operating revenue	238.9	552.8	313.9	131.4%
Rate base	6,659.6	6,659.6	0.0	0.0%
Return on rate base	3.59%	8.30%	4.71%	131.4%

CHAPTER 2: WATER CONSUMPTION AND OPERATING REVENUES

A. INTRODUCTION

This Chapter presents DRA's analysis and recommendations on water consumption and operating revenues for CWS' Oroville District. DRA analyzed CWS' report (Report on the Results of Operations and Prepared Testimony for the Oroville District), supporting work papers, methods of estimating water consumption and operating revenue, data responses, and supplementary data before formulating its own estimates. Table 2-A presents a summary of estimates developed by DRA and CWS.

Table 2-A Summary of Projected Consumption and Revenues

	<u>DRA</u>		<u>CWS</u>		<u>CWS Exceeds DRA</u>	
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
Total Operating Revenues (\$000)						
Present Rates	2,463.8	2,467.8	2,463.8	2,467.8	0.0	0.0
Utility Prop. Rates	3,464.6	3,598.1	3,464.6	3,598.1	0.0	0.0
Average Number of Customers						
Metered	3,231	3,261	3,231	3,261	0.0	0.0
Flat/ Fire Protection	389	377	389	377	0.0	0.0
Water Sales By Customer Class (Kccf/yr)						
Residential	469.4	474.5	469.4	474.5	0.0	0.0
Business	444.2	443.6	444.2	443.6	0.0	0.0
Multi-Family	61.7	61.7	61.7	61.7	0.0	0.0
Industrial	192.0	192.0	192.0	192.0	0.0	0.0
Public Authority	123.9	123.9	123.9	123.9	0.0	0.0
Other	1.9	1.9	1.9	1.9	0.0	0.0
Irrigation	173.7	173.7	173.7	173.7	0.0	0.0
Water Sales Per Average Customer (CCF/Connection/Year)						
Residential	198.3	198.3	198.3	198.3	0.0	0.0
Business	647.1	647.1	647.1	647.1	0.0	0.0
Multi-Family	4,404.2	4,404.2	4,404.2	4,404.2	0.0	0.0
Industrial	11,998.8	11,998.8	11,998.8	11,998.8	0.0	0.0
Public Authority	945.8	945.8	945.8	945.8	0.0	0.0
Other	237.5	237.5	237.5	237.5	0.0	0.0
Irrigation	21,712.8	21,712.8	21,712.8	21,712.8	0.0	0.0

B. SUMMARY OF RECOMMENDATIONS

1) Number of Customers

DRA has reviewed CWS' estimating methodology for determining the number of customers in the Test Year. CWS used a five-year average of annual customer growth to estimate the incremental number of customers unless there are mitigating outside factors. DRA accepts CWS' estimates for the number of customers in each of the six classes of customers for the Test Year.

2) Operating Revenues

DRA accepts CWS' revenue forecasting methodology. A detailed comparison for the Test Year is shown in Tables 2-6 and 2-7.

3) Consumption

CWS used 10 years of monthly temperature and rainfall data to develop the regression models and forecasts. CWS adjusted the data to remove the first four inches of rain recorded and to account for the billing lag associated with the temperature data. Removing the first four inches of rainfall is consistent with CPUC practice. This adjustment is necessary because, historically, rainfall above 4 inches during a month does not impact consumption. CWS' consultant used Econometric Views ("E-Views") to specify the regression models and develop the forecasts. Using E-Views software to estimate consumption per customer is now standard practice and is consistent with the "New Committee Method" recommended in D.04-06-018, the General Rate Case Plan for Class A Water Companies. In instances where the regression model yielded unsatisfactory statistics, for example, in the Residential and Other categories, a different estimating methodology was selected. Unsatisfactory statistics are indicated by a low R-squared, a Durbin-Watson statistic value not close to 2.00, and a low variable coefficient t-statistic.

1 While preparing its estimates, DRA reviewed and confirmed CWS' models
2 and forecasts. DRA accepts CWS' general forecasting methodology. DRA's and
3 CWS' estimates are generally derived from the average-use-per connection
4 forecasted for 2006 and then incorporated customer growth in 2007 and 2008.
5 These forecasts are then averaged to derive the fiscal Test Year estimates for
6 2007-08, and the escalation fiscal year 2008-09. Detailed discussions of the
7 forecasts are below.

8 **4) Unaccounted For Water ("UFW")**

9 CWS used a five-year average unaccounted for water percentage of 8.00%.
10 DRA agrees with this five-year average of 8% and recommends the Commission
11 adopt this percentage because it is reasonable.

12 **C. DISCUSSION**

13 **1) Number of Customers**

14 DRA's and CWS' customer forecasts are shown in Table 2-A above and at
15 the end of the Chapter in Tables 2-2 and 2-3.

16 **2) Operating Revenues**

17 Revenues requested by CWS and recommended by DRA based on the
18 present and proposed rates are shown above in Table 2-A and at the end of the
19 Chapter in Tables 2-6 and 2-7.

20 **3) Consumption**

21 DRA reviewed CWS' forecasts and developed its forecasts utilizing the
22 same set of historical data. DRA used an E-Views forecast where the statistics
23 indicated good results (an R-squared close to 1.00, a Durbin-Watson statistic near
24 2.00, and significant t-statistics) from using an E-Views model. In other instances,
25 DRA used an average of historical consumption similar to how CWS developed its

forecast. DRA's and CWS' forecasts are shown in Table 2-A above, and at the end of the Chapter in Table 2-1.

The basic forecast equation starts with a constant term, a temperature variable, a rain variable, and a time variable. Depending on the statistics generated by this simple model adjustments may be made to the model to provide a superior estimate. Some of the modifications may include substituting the individual monthly temperature variables, including an autoregressive term, or including a dummy variable. Specific forecasts are discussed below.

(a) Residential

DRA used the same forecast method as CWS. The E-Views equation included a constant term, twelve temperature variables (representing each month), a time variable, but no autoregressive term. After reviewing the results of the water sales E-Views model, both DRA and CWS observed that the results were too low and did not fairly represent future water sales potential for this customer class. A five-year average calculation of historic consumption for metered sales per customer provides a better representation. DRA agrees with CWS' method of forecasting residential sales.

DRA calculated annual residential water consumption by multiplying the projected consumption per customer in hundreds of cubic feet (CCF) by the projected number of customers. DRA multiplied CWS' forecast result of 198.3 Ccf per customer by the average number of customers per year to estimate the total metered sales for 2006, 2007, and 2008. To estimate the 2007-08 fiscal Test Year sales, CWS used an average of the 2007 and 2008 estimates. DRA agrees with the resulting total water sales of 469.4 thousand cubic feet (Kccf) per year for residential customer class as shown above in Table 2-A.

1 (b) Business

2 DRA used the same forecast method as CWS. The E-Views model
3 returned statistical results that were too low compared to historic usage, thus, it
4 was not used to forecast this customer class. Both DRA and CWS used a five-year
5 average consumption resulting in a forecast of 647.1 Ccfs per connection per year.
6 DRA and CWS multiplied the consumption by the average number of customers
7 then divided by one thousand to derive the Total Metered Sales of 444.2 Kccf per
8 year for Fiscal Test Year 2007-08. DRA agrees with this forecast.

9 (c) Multifamily

10 DRA used the same forecast method as CWS. The E-Views equation
11 included a constant term, nine temperature variables (due to removal of error
12 terms in temperature variables for February, March and April), a time variable, an
13 autoregressive term, and a dummy variable to remove a data point error. DRA
14 concurs with CWS' forecast of 4404.2 Ccfs per connection per year and the
15 calculated Total Metered Sales of 61.7 Kccf per year for the Fiscal Test Year of
16 2007-08.

17 (d) Industrial

18 DRA used the same forecast method as CWS. The E-Views standard
19 model for estimating the industrial sales generated unsatisfactory statistics.
20 Therefore, DRA did not use the E-views equation. CWS used a five-year average
21 to forecast 192.0 Kccf total consumption per year. To derive the consumption per
22 average customer divide the total Kccf by the average number of customers and
23 multiply by one thousand. This calculates to 11,998.8 Ccf per average customer
24 for Fiscal Test Year 2007-08. DRA agrees with this forecasting method and its
25 results.

1 (e) Public Authority

2 DRA used the same forecast method as CWS. CWS did not use the E-
3 Views model to forecast sales for the public authority customer class. Upon
4 review of the E-Views model results, both DRA and CWS observed that the
5 results were too low and did not fairly represent the future potential sales for this
6 class. CWS' used a five-year average to forecast 123.9 Kccf total consumption and
7 DRA agrees with this method. To derive the consumption per customer divide the
8 total Kccfs by the average number of customers then multiplied by 1000. This
9 calculates to 945.8 Ccf consumption per customer per year for Fiscal Test Year
10 2007-08. DRA finds this reasonable and concurs with CWS' forecast.

11 (f) Other

12 For the Other customer class CWS did not have a suitable forecast E-Views
13 model. Historical data begins in 2003, so CWS used a two-year average to forecast
14 1.9 Kccf per total consumption. By dividing the consumption by the average
15 number of customer then multiplying by 1000 CWS calculated the forecast of
16 237.5 Ccfs per customer per year for Fiscal Test Year 2007-08. DRA concurs with
17 this forecasting method and the results.

18 (g) Irrigation

19 CWS did not use the E-Views forecasting model for this customer class,
20 due to a marked change in the level of consumption after 2001. CWS used a four-
21 year average year end usage as the forecasting method because the last four years
22 of data are the ones relevant to predicting future sales. DRA agrees with this
23 forecast method and concurs with the results of 173.7 Kccf annual consumption,
24 and the calculation of 21,712.8 Ccf per irrigation customer per year for the Fiscal
25 Test Year 2007-08.

1 **4) Unaccounted For Water (“UFW”)**

2 Since there are flat rate customers in Oroville District, the actual amount of
3 UFW cannot be accurately measured and projected. UFW includes leakage of
4 water from the system prior to sale and water used for system flushing and
5 maintenance. CWS estimates 8.00% for unaccounted for water based on a five-
6 year average. DRA agrees with this estimation.

7 **5) Total Water Consumption and Supply**

8 Total water consumption is the sum of metered, un-metered sales and
9 unaccounted for water. The Oroville District does have some residential flat rate
10 customers, and private and public fire protection un-metered customers. The
11 majority of supply is purchased water from two separate surface water sources,
12 diversion from PG&E’s Coal Canyon Power Plant canal, and diversion from the
13 State Water Project’s Thermalito Power Canal. CWS also has company
14 groundwater wells that supply a small portion of its water supply. The total
15 consumption and water supply levels for the Test Year and Escalation Year are
16 shown in Tables 2-4 and 2-5.

17 **D. CONCLUSION**

18 **1) Number of Customers**

19 DRA concurs with CWS’ estimated number of customers for the Test
20 Years.

21 **2) Operating Revenues**

22 DRA finds CWS’ revenue forecast reasonable and recommends the
23 Commission adopt the revenue forecasts in Tables 2-6 and 2-7.

1 **3) Consumption**

2 DRA finds CWS' forecasts of consumption reasonable and recommends
3 the Commission adopt the numbers shown in Table 2-1.

4 **4) Unaccounted For Water**

5 DRA finds CWS' five-year average percentage recommendation of 8%
6 UFW reasonable and should be adopted.

7

TABLE 2-1

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT
WATER SALES PER AVERAGE CUSTOMER

TEST YEAR 2007 - 2008

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(CCF/CONN./YR)				
Residential	198.3	198.3	0.0	0.0%
Business	647.1	647.1	0.0	0.0%
Multiple Family	4,404.2	4,404.2	0.0	0.0%
Industrial	11,998.8	11,998.8	0.0	0.0%
Public Authority	945.8	945.8	0.0	0.0%
Other	237.5	237.5	0.0	0.0%
Irrigation	21,712.8	21,712.8	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%

8

TABLE 2-2
CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

AVERAGE NUMBER OF CUSTOMERS

TEST YEAR 2007 - 2008

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	2,367	2,367	0.0	0.0%
Business	687	687	0.0	0.0%
Multiple Family	14	14	0.0	0.0%
Industrial	16	16	0.0	0.0%
Public Authority	131	131	0.0	0.0%
Other	8	8	0.0	0.0%
Irrigation	8	8	0.0	0.0%
Reclaimed	0	0	0.0	0.0%
Total metered connections	3,231	3,231	0.0	0.0%
<u>Flat Rate Connections</u>				
Residential Flat	296	296	0.0	0.0%
Private Fire Protection	85	85	0.0	0.0%
Public Fire Protection	8	8	0.0	0.0%
Total flat rate connections	389	389	0.0	0.0%
<u>Total Active Connections</u>				
Include Fire Protection	3,620	3,620	0.0	0.0%
Exclude Fire Protection	3,527	3,527	0.0	0.0%

TABLE 2-3

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

AVERAGE NUMBER OF CUSTOMERS

ESCALATION YEAR 2008 - 2009

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	2,393	2,393	0.0	0.0%
Business	686	686	0.0	0.0%
Multiple Family	14	14	0.0	0.0%
Industrial	16	16	0.0	0.0%
Public Authority	135	135	0.0	0.0%
Other	9	9	0.0	0.0%
Irrigation	8	8	0.0	0.0%
Reclaimed	0	0	0.0	0.0%
Total metered connections	3,261	3,261	0.0	0.0%
<u>Flat Rate Connections</u>				
Residential Flat	282	282	0.0	0.0%
Private Fire Protection	87	87	0.0	0.0%
Public Fire Protection	8	8	0.0	0.0%
Total flat rate connections	377	377	0.0	0.0%
<u>Total Active Connections</u>				
Include Fire Protection	3,638	3,638	0.0	0.0%
Exclude Fire Protection	3,543	3,543	0.0	0.0%

TABLE 2-4

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

TOTAL SALES AND SUPPLY

TEST YEAR 2007 - 2008

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(KCCF/YEAR)				
<u>Metered Sales</u>				
Residential	469.4	469.4	0.0	0.0%
Business	444.2	444.2	0.0	0.0%
Multiple Family	61.7	61.7	0.0	0.0%
Industrial	192.0	192.0	0.0	0.0%
Public Authority	123.9	123.9	0.0	0.0%
Other	1.9	1.9	0.0	0.0%
Irrigation	173.7	173.7	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
<hr/>				
Total metered sales	1,466.8	1,466.8	0.0	0.0%
<u>Flat Rate Sales</u>				
Commercial	138.1	138.1	0.0	0.0%
Unaccounted For Water 8.00%	139.6	139.6	0.0	0.0%
<hr/>				
Total delivered	1,744.4	1,744.4	(0.1)	0.0%
<u>Supply</u>				
Company Wells	127.5	127.5	0.0	0.0%
Leased Wells	2.1	2.1	0.0	0.0%
Purchases - raw water	1,614.9	1,614.9	0.0	0.0%
<hr/>				
Total potable waterproduction	1,744.5	1,744.5	0.0	0.0%
Treatment Plant production	1,441.2	1,441.2	0.0	0.0%
Total Potable Water Production	1,570.7	1,570.7	0.0	0.0%

TABLE 2-5

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

TOTAL SALES AND SUPPLY

ESCALATION YEAR 2008 - 2009

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(KCCF/YEAR)				
<u>Metered Sales</u>				
Residential	474.5	474.5	0.0	0.0%
Business	443.6	443.6	0.0	0.0%
Multiple Family	61.7	61.7	0.0	0.0%
Industrial	192.0	192.0	0.0	0.0%
Public Authority	123.9	123.9	0.0	0.0%
Other	1.9	1.9	0.0	0.0%
Irrigation	173.7	173.7	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
<hr/>				
Total metered sales	1,471.2	1,471.2	0.0	0.0%
<u>Flat Rate Sales</u>				
Commercial	138.1	138.1	0.0	0.0%
Unaccounted For Water 8.00%	139.9	139.9	(0.0)	0.0%
<hr/>				
Total delivered	1,749.3	1,749.2	(0.0)	0.0%
<u>Supply</u>				
Company Wells	127.5	127.5	0.0	0.0%
Leased Wells	2.1	2.1	0.0	0.0%
Purchases - Raw Water	1,619.8	1,619.8	0.0	0.0%
<hr/>				
Total potable water production	1,749.4	1,749.4	0.0	0.0%
Treatment Plant Production	1,446.1	1,446.1	0.0	0.0%
Total Potable Water Production	1,575.6	1,575.6	0.0	0.0%

TABLE 2-6

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

OPERATING REVENUES

TEST YEAR 2007 - 2008

(AT PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>Metered Revenues</u>				
Residential	980.9	980.9	0.0	0.0%
Business	704.0	704.0	0.0	0.0%
Multiple Family	84.3	84.3	0.0	0.0%
Industrial	230.2	230.2	0.0	0.0%
Public Authority	202.2	202.2	0.0	0.0%
Other	10.9	10.9	0.0	0.0%
Irrigation	3.6	3.6	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
<hr/>				
Total General Metered	2,216.1	2,216.1	0.0	0.0%
<u>Flat Rate Revenues</u>				
Residential Flat	174.0	174.0	0.0	0.0%
Private Fire Protection	40.9	40.9	0.0	0.0%
Public Fire Protection	3.1	3.1	0.0	0.0%
Other	7.6	7.6	0.0	0.0%
<hr/>				
Total Flat Rate	225.6	225.6	0.0	0.0%
Deferred Revenues	22.1	22.1	0.0	0.0%
Total revenues	2,463.8	2,463.8	0.0	0.0%

TABLE 2-7

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

OPERATING REVENUES

TEST YEAR 2007 - 2008

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>Metered Revenues</u>				
Residential	1,363.1	1,363.1	0.0	0.0%
Business	1,014.8	1,014.8	0.0	0.0%
Multiple Family	121.4	121.4	0.0	0.0%
Industrial	319.7	319.7	0.0	0.0%
Public Authority	299.1	299.1	0.0	0.0%
Other	18.7	18.7	0.0	0.0%
Irrigation	5.1	5.1	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
<hr/>				
Total General Metered	3,142.0	3,142.0	0.0	0.0%
<u>Flat Rate Revenues</u>				
Residential Flat	244.7	244.7	0.0	0.0%
Private Fire Protection	44.3	44.3	0.0	0.0%
Public Fire Protection	3.4	3.4	0.0	0.0%
Other	8.2	8.2	0.0	0.0%
<hr/>				
Total Flat Rate	300.5	300.5	0.0	0.0%
Deferred Revenues	22.1	22.1	0.0	0.0%
Total revenues	3,464.6	3,464.6	0.0	0.0%

1 CHAPTER 3: OPERATIONS AND MAINTENANCE EXPENSES

2 A. INTRODUCTION

3 This chapter presents DRA's analyses and recommendations on Operation
4 and Maintenance (O&M) expenses in the Oroville District(s) of California Water
5 Service Company (CWS). Table 3-1 compared in detail DRA's and CWS O&M
6 estimates for the Fiscal Year 2007-2008 and the Fiscal Year 2008-2009. All
7 DRA's estimates are in Nominal Dollars. A comparison of total expense estimates
8 at present rates for these years are shown in Table 3-A:

9 Table 3-A: A comparison of total O&M expense estimates at present rates:
10 DRA's and CWS O&M estimates for the Fiscal Year 2007-2008 and the Fiscal
11 Year 2008-2009.

DRA: Fiscal Year 2007-2008	CWS: Fiscal Year 2007-2008	DRA: Fiscal Year 2008-2009	CWS: Fiscal Year 2008-2009	Utility Exceeds DRA Fiscal 2007-2008	DRA Exceeds Utility Fiscal 2008-2009
\$1,087,800	\$1,116,300	\$1,105,300	\$1,132,300	\$28,400 2.6%	\$26,900 2.4%

12 DRA's analyses of CWS estimates for the Fiscal Year 2007-2008 and the
13 Fiscal Year 2008-2009 include the following analyses as listed below—[(1)
14 through (6)]--of CWS recorded historical expense trends (2000-2005) and CWS
15 estimates for the Fiscal Year 2007-2008 and the Fiscal Year 2008-2009; using
16 estimates from Test Years 2006, 2007 and 2008.

- 17 (1) A 5-Year Regression Analysis (2001-2005)
18 (2) A 3-Year Regression Analysis (2003-2005)
19 (3) 5-Year Averages (2001-2005)
20 (4) 3-Year Averages (2003-2005)
21 (5) Last Year Recorded Amounts as base Year 2005

1 (6) Annualization of the Last 8-months of recorded data (January 2006-August
2 2006).

3 DRA selected the methodology that best fits CWS recorded historical
4 expense trends (2000-2005) for its analysis and estimates for the Fiscal Year 2007-
5 2008 and the Fiscal Year 2008-2009. All DRA estimates are in Nominal Dollars.

6 The inflation factors used by DRA are recommended by the Commission's
7 Division of Ratepayers Advocates (DRA) Energy Cost of Service Branch (ECOS),
8 which has traditionally handled inflation issues for the Commissions. These
9 factors were provided in a Memorandum from ECOS dated Aug. 31, 2006. The
10 Labor escalation factors are the Consumer Price Index for all Urban Consumers
11 (CPI-U). The Non-Labor escalation factors are generated from a composite index
12 of 10 Wholesale Price Indexes for material and supply expenses, and the CPI-U
13 weighted 5% for services and consumer related items. The 60/40 factor is a
14 composite index; derive from weighting 60 percent Non-Labor and 40 percent for
15 the Compensation per Hour Index. These indices are derived from the monthly
16 DRI-WEFA publication, "U.S. Economic Outlook." The above indices and
17 weightings are in conformance with an agreement reached between the
18 Commission's Water Division and the California Water Association under the new
19 rate case plan adopted in D.04-06-018.

20 **B. SUMMARY OF RECOMMENDATIONS**

21 DRA conducted independent analyses of CWS work papers and methods of
22 estimating the Operating and Maintenance expenses for the Fiscal Year 2007-2008
23 and the Fiscal Year 2008-2009. CWS used a 5-year average of historical expenses
24 adjusted for inflation for the Fiscal Year 2007-2008 and the Fiscal Year 2008-
25 2009 expenses.

26 DRA used alternative projection methods which were then compared with
27 CWS projections and its historical operations. DRA projections are identified in

1 Table 3-1 at the end of this Chapter. DRA estimated \$1,063,000 and \$1,098,900
2 for Fiscal Year 2007-2008 and Fiscal Year 2008-2009 expenses respectively. The
3 methodologies used by DRA are discussed in the following sections. DRA
4 recommends that the Commission adopts its O & M numbers as reasonable.

5 **Table 3-B: Escalation Factors**

Year	Compensation per hour Non-farm rate		Inflation Rates (%)				Composite Rates % 40/60 Split	
	Calendar Annual % Changes	Fiscal Annual % Changes	Calendar		Fiscal		Calendar	Fiscal
			Non- Labor	Lab or	Non- Labor	Labor		
1997	3.6	4.5	0.6	--	0.3	--	1.8	2.0
1998	5.3	4.9	0.0	2.3	0.4	1.9	2.1	2.2
1999	4.4	5.7	0.7	1.5	2.1	1.9	2.2	3.5
2000	6.9	4.8	3.5	2.2	1.8	2.8	4.9	3.0
2001	2.7	2.8	0.0	3.4	0.0	3.1	1.1	1.1
2002	2.8	3.4	0.0	2.8	1.3	2.2	1.1	2.1
2003	4.0	4.3	2.5	1.6	4.2	2.0	3.1	4.2
2004	4.5	4.8	5.8	2.3	5.7	2.5	5.3	5.3
2005	5.1	4.4	5.5	2.7	5.7	3.1	5.3	5.2
2006	3.7	3.8	5.9	3.4	4.4	3.5	5.0	4.2
2007	3.9	3.9	2.8	3.6	1.8	3.1	3.2	2.6
2008	3.8	3.9	0.7	2.5	0.4	2.2	1.9	1.8
2009	4.0	4.1	0.1	1.8	0.1	1.8	1.7	1.7
2010	4.1	--	0.0	1.7	--	--	1.6	--

6

7 **C. DISCUSSION**

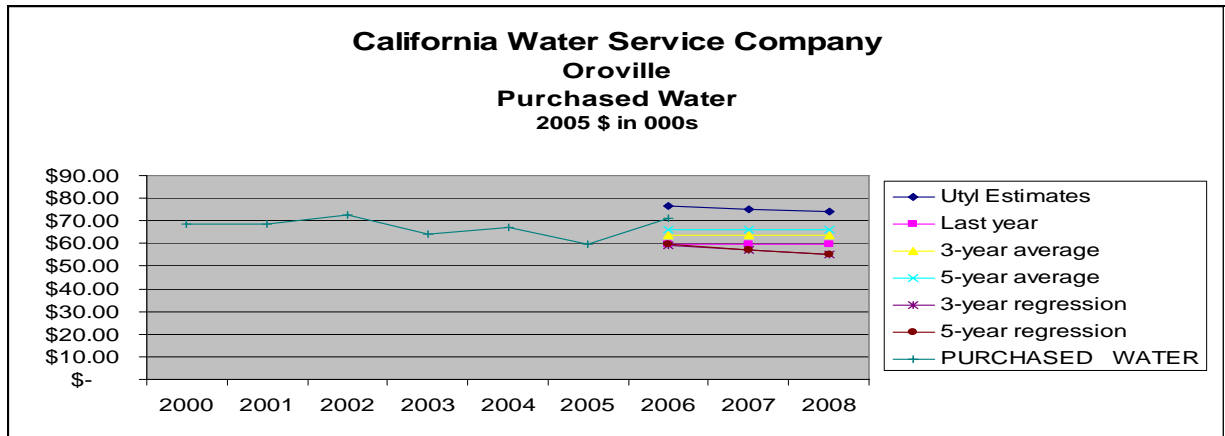
8 **1) PURCHASED WATER**

9 CWS has a flat annual rate contract with Pacific Gas and Electric Company
10 to purchase tailrace water from its Coal Canyon hydroelectric powerhouse on the
11 Miocene Canal upstream of Oroville. CWS also is diverting some water from its

Gold Rum diversion ditch. CWS estimated \$79,300 for the Fiscal Year 2007-2008 and \$79,300 for Fiscal Year 2008-2009 respectively. The historical trend show that Purchase Water costs fluctuate between \$70,000 and \$60,000. The 2006 annualized amount is \$70,900. There DRA believe it is reasonable to used 2006 annualize amount for the Fiscal Year 2007-2008 and adjusted the \$70,900 for inflation. DRA estimated \$70,000 for the Fiscal Year 2007-2008 and \$72,700 for Fiscal Year 2008-2009 respectively. Ref. Table 3-C. DRA ask that its estimates of \$70,000 and \$72,700 for the Fiscal Year 2007-2008 and Fiscal Year 2008-2009 respectively be accepted.

Table 3-C: Purchase Water—Trend Analysis

California Water Service Company									
Oroville									
Purchased Water									
2005 \$ in 000s									
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Utl Estimates							\$ 76.62	\$ 75.29	\$ 73.90
Last year							\$ 59.70	\$ 59.70	\$ 59.70
3-year average							\$ 63.63	\$ 63.63	\$ 63.63
5-year average							\$ 66.37	\$ 66.37	\$ 66.37
3-year regression							\$ 59.34	\$ 57.20	\$ 55.05
5-year regression							\$ 59.53	\$ 57.26	\$ 54.98
PURCHASED WATER	\$ 68.72	\$ 68.45	\$ 72.49	\$ 63.99	\$ 67.21	\$ 59.70	\$ 70.87		



2) PRODUCED WATER: GROUND WATER EXTRACTION CHARGES

CWS Groundwater Extraction Charges are zero (\$0.0).

1 **3) REPLISHMENT ASSESSMENT**

2 CWS has no replenishment assessment fees.

3 **4) PURCHASED POWER**

4 Purchased power is the cost of electricity needed to operate a district,
5 including the power used in pumping and delivering water. The estimate of
6 purchased power varies from year to year, and month to month based on
7 differences in local demand, maintenance schedules, and other operational
8 considerations such as the quality of water delivered. This calculation also takes
9 into account the historical ratio of electricity used to the amount of water pumped.

10 CWS estimates of purchase power costs per production unit were based on
11 usage patterns of each production component, using a model of power cost per
12 kilowatt-hour at various levels of production. CWS model estimates costs per
13 kilowatt-hour at current rates (Pacific Gas and Electric Company schedules
14 effective May1, 2006) using the historical average of kilowatt-hours per unit of
15 production and the last three years of recorded data (2003-2005). Because fixed
16 components of the bill are spread over more units of production, the costs per
17 kilowatt-hour generally decline with increasing uses. When the data (kilowatt-
18 hour) used show a specific pattern, CWS uses a forecast methodology to predict
19 estimated power cost from the estimated kilowatt-hour demand. If no specific
20 patterns are observed, CWS uses an average such as a 5-year average.

21 In the Oroville District, CWS estimates the power costs independently for
22 its Wells, Boosters, treatment plant and pumping power for Butte County
23 purchased water. In the Bakersfield District's NW treatment plant, CWS uses the
24 Oroville treatment—similar in size as comparison in estimating the power usage
25 per unit of production. Because of the water mix changes, an independent analysis
26 is adequate for estimating power costs. CWS uses a forecast model methodology
27 to estimate the kilowatt-hour used.

Boosters: CWS uses the average power costs to forecast booster power costs; the model estimates an average output of \$0.138 per kilowatt-hour.

Oroville wells: The model estimate is \$0.13565 per kilowatt-hour.

Treatment plant: The last three years of data showed a poor relationship between power consumption and average unit power costs therefore, CWS based its estimated costs per kilowatt-hour on the three year average (2003-2005).

CWS estimated \$218,500 and 218,900 for the Fiscal Year 2007-2008 and Fiscal Year 2008-2009 respectively.

DRA accepts CWS estimates of \$218,500 and 218,900 for the Fiscal Year 2007-2008 and Fiscal Year 2008-2009 respectively.

5) PURCHASED CHEMICAL

CWS Purchased Chemical expenses are a function annual water productions and the cost of chemical. CWS estimates are based on the last 3-years average unit production adjusted for inflation. CWS estimated expenses are \$63,100 for Fiscal Year 2007-2008 and \$64,500 for Fiscal Year 2008-2009 respectively.

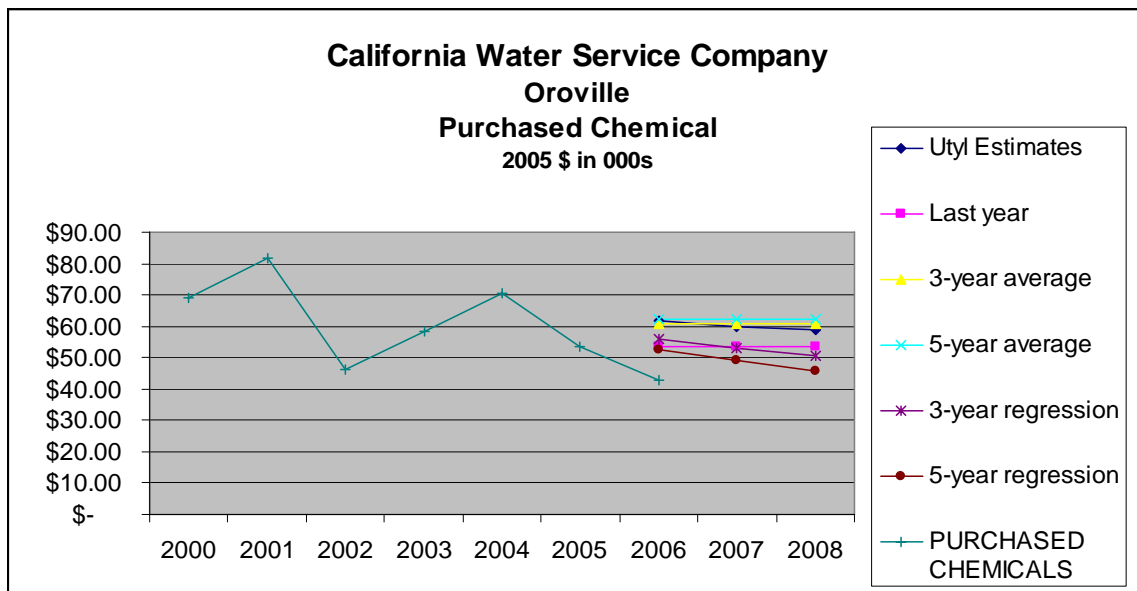
DRA used last year's (2005) data to estimate its numbers. Reference Table 3-D.

DRA estimated \$58,500 and \$59,500 for Fiscal Year 2007-2008 and Fiscal Year 2008-2009 respectively.

DRA ask that its estimates of \$58,500 and \$59,500 for Fiscal Year 2007-2008 and Fiscal Year 2008-2009 respectively be adopted.

Table 3-D: Purchased Chemical

California Water Service Company									
Oroville									
Purchased Chemicals									
2005 \$ in 000s									
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Utl Estimates							\$ 61.55	\$ 59.63	\$ 58.71
Last year							\$ 53.40	\$ 53.40	\$ 53.40
3-year average							\$ 60.81	\$ 60.81	\$ 60.81
5-year average							\$ 62.07	\$ 62.07	\$ 62.07
3-year regression							\$ 55.76	\$ 53.24	\$ 50.72
5-year regression							\$ 52.35	\$ 49.10	\$ 45.86
PURCHASED CHEMICALS	\$ 68.95	\$ 81.86	\$ 46.08	\$ 58.45	\$ 70.58	\$ 53.40	\$ 42.75		



6) LABOR

Labor costs included payroll expenses, wages and salaries and overtime for district personnel. However, labor costs does not include benefits, the benefits costs are included in the General Office labor accounts. CWS capitalizes labor expenses for its districts. An historic five-year average of capitalized payroll was applied to the total payroll to calculate a capitalized payroll percentage of 8.15%. The capitalized payroll percentage was applied to total forecasted labor expenses for the base year 2006 and the Fiscal Year 2007-2008 and Fiscal Year 2008-2009. Labor is broken down into O&M and A&G categories based on the 2005 recorded costs for each category. CWS O & M payroll category included Operation Payroll and Maintenance Payroll. DRA estimates of A&G labor are based on a percentage allocation of the total (100%) Operating Payroll. DRA's estimates of A&G labor

1 for the Fiscal Year 2007-2008 and Fiscal Year 2008-2009 are described in Chapter
2 4.

3 CWS did ask for additional staff for its Oroville district; in 2007. Ref.
4 Table 3-E.

5 Table 3-E: CWS Request for Additional Workers

District	Oroville	Oroville	Oroville
Year	2006	2007	2008
Personnel	None	1 Customer Service Representative	None

6 **7) OPERATION PAYROLL**

7 Operation payroll: CWS used the last recorded year (2005) as its base year
8 for estimating the labor costs. The payroll expenses are based on the existing
9 district's payroll levels adjusted for new employees and escalated by CWS labor
10 inflation factors which are 3.5% for 2006—based on union contracts—and 3.5%
11 for 2007. There is no union contract for 2008.

12 DRA did not challenge CWS Operation Payroll estimates for the Test
13 Years 2006, 2007 and 2008 and the Fiscal Year 2007-2008 and Fiscal Year 2008-
14 2009. CWS estimated \$425,800 and \$433,800 for the Fiscal Year 2007-2008 and
15 Fiscal Year 2008-2009 respectively; the addition of the 1 CSR is accepted.

16 DRA accepts CWS estimates of \$425,800 and \$433,800 for the Fiscal Year
17 2007-2008 and Fiscal Year 2008-2009 respectively.

18 **8) POSTAGE**

19 Postage costs are a function of postage rates, the number of customers and
20 the number of annual mailings to each customer. CWS used the last recorded year
21 (2005) adjusted for inflation. CWS estimated \$14,900 and \$15,100 for Fiscal Year
22 2007-2008 and Fiscal Year 2008-2009 respectively.

1 DRA accepts CWS estimates of \$14,900 and \$15,100 for the Fiscal Year
2 2007-2008 and Fiscal Year 2008-2009 respectively.

3 **9) TRANSPORTATION**

4 CWS estimated Transportation expenses at \$47,100 and \$48,000 for Fiscal
5 Year 2007-2008 and Fiscal Year 2008-2009 respectively. DRA accept CWS
6 estimates of, \$47,100 and \$48,000 for Fiscal Year 2007-2008 and Fiscal Year
7 2008-2009 respectively.

8 **10) UNCOLLECTIBLES**

9 Uncollectible are payments due to CWS that the company has been unable
10 to collect. The CPUC does recognize that uncollectible are a normal cost of doing
11 business. CWS test year uncollectible expenses are derived from the last 5-year
12 average percentage of uncollectible, multiplied by the present and proposed
13 revenue. CWS estimated Uncollectible expense rates at 0.70% for Fiscal Year
14 2007-2008 and Fiscal Year 2008-2009 respectively. DRA estimated 0.72% for
15 Fiscal Year 2007-2008 and for Fiscal Year 2008-2009 respectively. Ref. Table 3-
16 F.

17 DRA ask that its estimates of 0.72% for Fiscal Year 2007-2008 and Fiscal
18 Year 2008-2009 respectively be adopted.

19 **11) SOURCE OF SUPPLY**

20 CWS used a 5-year inflation adjusted average in estimating Source of
21 Supply expenses. CWS estimated Source of Supply expenses for Fiscal Year
22 2007-2008 and Fiscal Year 2008-2009 are \$26,000 and \$26,400 respectively.

23 DRA accept CWS estimates of, \$26,000 and \$26,400 for Fiscal Year 2007-
24 2008 and Fiscal Year 2008-2009 respectively.

1 **12)PUMPING EXPENSES**

2 This expense category track costs of equipment, materials and other Misc.
3 pumping costs and outside services related to pumping. CWS estimated Misc.
4 pumping costs at \$6,500 and \$6,600 for Fiscal Year 2007-2008 and Fiscal Year
5 2008-2009 respectively.

6 DRA accept CWS estimates of \$6,500 and \$6,600 for Fiscal Year 2007-
7 2008 and Fiscal Year 2008-2009 respectively.

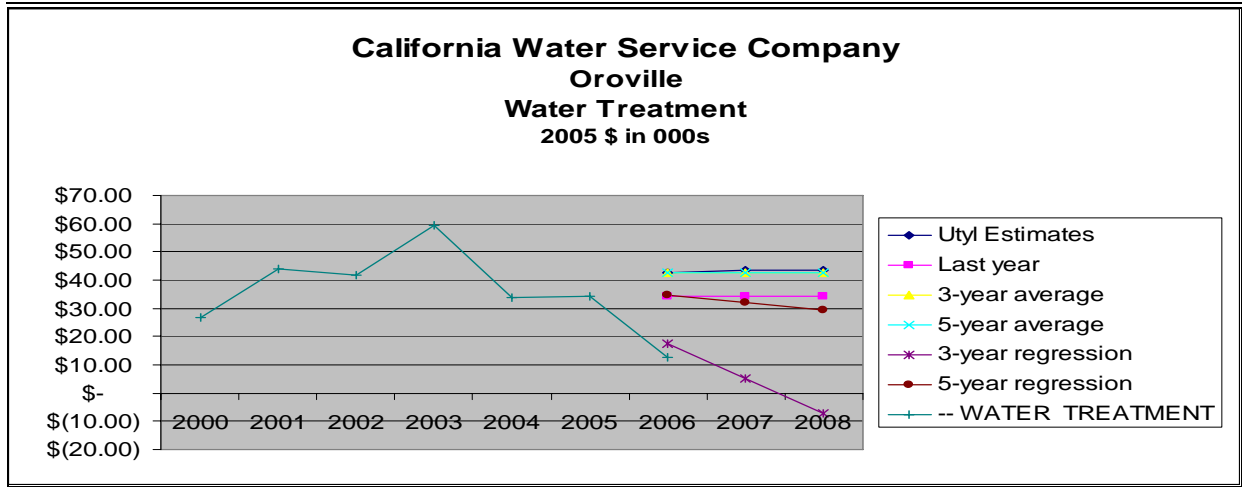
8 **13)WATER TREATMENT**

9 Water treatment costs tracks material, equipment maintenance, and outside
10 services relating to the operation of treatment plant. Chemical costs are accounted
11 for separately. CWS estimated Water Treatment expenses at \$46,600 and \$47,400
12 for Fiscal Year 2007-2008 and Fiscal Year 2008-2009 respectively. Although the
13 2006 annualized data show a sharp downward trend (\$12,610), DRA considers
14 this an aberration. Therefore, used last year (2005) recorded amount adjusted for
15 inflation. DRA estimated \$37,700 and \$38,400 for Fiscal Year 2007-2008 and
16 Fiscal Year 2008-2009 respectively. Ref. Table 3-G.

17 DRA ask that its estimates of \$37,700 and \$38,400 for Fiscal Year 2007-
18 2008 and Fiscal Year 2008-2009 respectively be accepted.

19 Table 3-G: Water Treatment.

California Water Service Company									
Oroville									
Water Treatment									
2005 \$ in 000s									
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Utl Estimates							\$ 42.71	\$ 43.39	\$ 43.34
Last year							\$ 34.40	\$ 34.40	\$ 34.40
3-year average							\$ 42.59	\$ 42.59	\$ 42.59
5-year average							\$ 42.69	\$ 42.69	\$ 42.69
3-year regression							\$ 17.65	\$ 5.19	\$ (7.28)
5-year regression							\$ 34.69	\$ 32.02	\$ 29.35
-- WATER TREATMENT	\$ 26.76	\$ 43.82	\$ 41.85	\$ 59.33	\$ 34.02	\$ 34.40	\$ 12.61		



14)TRANSMISSION AND DISTRIBUTION

CWS used a 5-year inflation adjusted average in estimating Transmission and Distribution Misc. expenses for the Fiscal Year 2007-2008 and the Fiscal Year 2008-2009; CWS estimates for the Fiscal Year 2007-2008 and the Fiscal Year 2008-2009 are \$19,900 and \$20,300 respectively.

DRA accept CWS methodology and CWS estimates of \$19,900 and \$20,300 for the Fiscal Year 2007-2008 and the Fiscal Year 2008-2009 respectively.

15)CUSTOMER ACCOUNTING

CWS estimated Customer Accounting expenses for the Fiscal Year 2007-2008 and the Fiscal Year 2008-2009 to be \$41,500 and \$42,300 respectively.

1 DRA accept CWS methodology and CWS estimates of \$41,500 and
2 \$42,300 for the Fiscal Year 2007-2008 and the Fiscal Year 2008-2009
3 respectively.

4 **16)CONSERVATION**

5 Under the Memorandum of Understanding on Urban Water Conservation.,
6 CWS must implement cost-effective programs when they are funded by the
7 Commission. Programs break down for conservation and estimates are based on
8 the Urban Water Management Plan. In 1991, the California Urban Water
9 Conservation Council (CUWCC) crafted a Memorandum of Understanding
10 (MOU) regarding Urban Water Conservation in California. Signatories of the
11 MOU identified 14 Best Management Practices (BMPs) for water conservation.
12 CWS estimates for the Fiscal Years 2007-2008 and 2008-2009 are \$5,700 and
13 \$5,800 respectively.

14 DRA accept CWS estimates of \$5,700 and \$5,800 respectively for the
15 Fiscal Year 2007-2008 and the Fiscal Year 2008-2009.

16 **17)MAINTENANCE: PAYROLL**

17 CWS estimated \$50,800 and \$51,700 for the Fiscal Year 2007-2008 and
18 Fiscal Year 2008-2009 respectively.

19 DRA accept CWS estimates of \$50,800 and \$51,700 respectively for the
20 Fiscal Year 2007-2008 and the Fiscal Year 2008-2009.

21 **18)MAINTENANCE: TRANSPORTATION**

22 CWS estimated Maintenance Transportation expenses at \$7,900 and \$8,000
23 for Fiscal Year 2007-2008 and Fiscal Year 2008-2009 respectively. DRA accept
24 CWS estimates of, \$7,900 and \$8,000 for Fiscal Year 2007-2008 and Fiscal Year
25 2008-2009 respectively

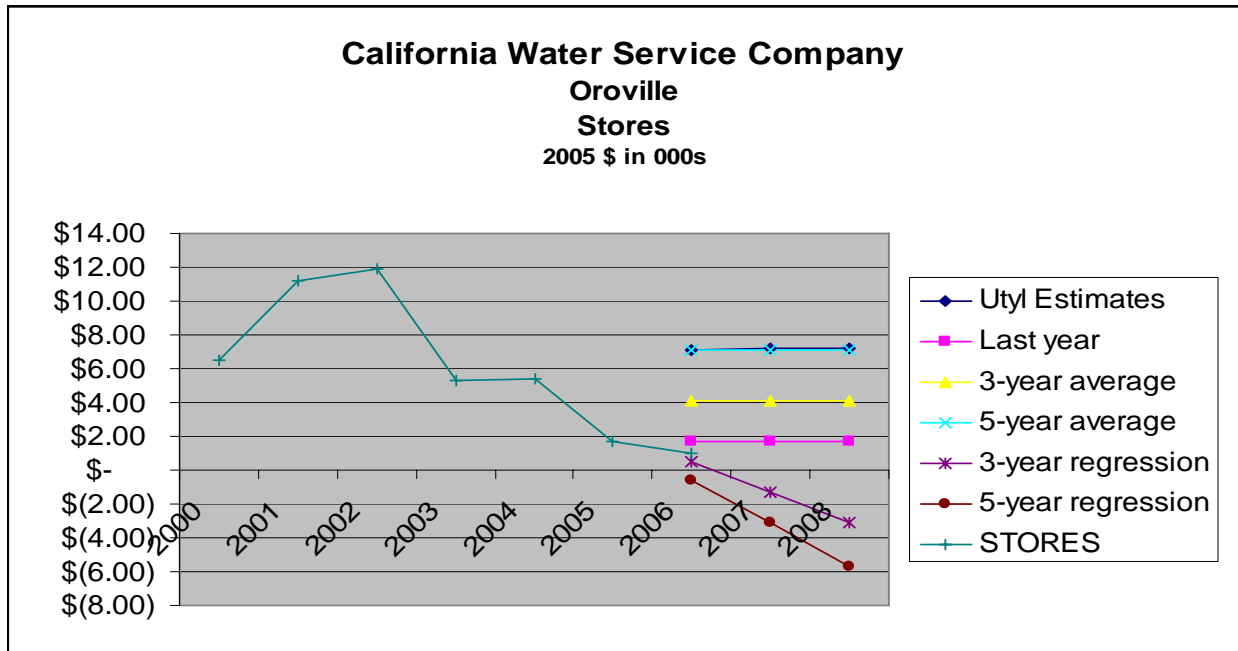
19) MAINTENANCE: STORES

CWS used a 5-year inflation adjusted average in estimating Stores expenses. CWS estimated Stores expenses at \$7,800 and \$7,900 for Fiscal Year 2007-2008 and Fiscal Year 2008-2009 respectively. DRA estimated \$1,900 and \$1,900 for Fiscal Year 2007-2008 and Fiscal Year 2008-2009 respectively. DRA based its estimates on last year's (2005) recorded estimate, adjusted for inflation. Ref. Table 3-H.

DRA ask that its estimates of \$1,900 for Fiscal Year 2007-2008 and \$1,900 for Fiscal Year 2008-2009 respectively be accepted.

Table 3-H: Stores Expenses.

California Water Service Company									
Oroville									
Maintenance Stores									
2005 \$ in 000s									
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Utl Estimates							\$ 7.05	\$ 7.22	\$ 7.18
Last year							\$ 1.70	\$ 1.70	\$ 1.70
3-year average							\$ 4.13	\$ 4.13	\$ 4.13
5-year average							\$ 7.10	\$ 7.10	\$ 7.10
3-year regression							\$ 0.51	\$ (1.30)	\$ (3.11)
5-year regression							\$ (0.56)	\$ (3.12)	\$ (5.67)
STORES	\$ 6.54	\$ 11.22	\$ 11.89	\$ 5.32	\$ 5.37	\$ 1.70	\$ 1.01		



1 **20)MAINTENANCE: CONTRACTED MAINTENANCE**

2 Contracted Maintenance only includes services and supplies provided by
3 outside contractors for the maintenance of the district facilities. This category
4 includes, without limitation, services related to:

- 5 a. Raising Valve Casings
- 6 b. Repairing Fire Hydrants
- 7 c. Repairing Reservoirs
- 8 d. Painting Water Tanks
- 9 e. Sealing Field Yard Pavement
- 10 f. Painting and Repairing Building Interiors

11 CWS estimated Contracted Maintenance expenses at \$38,100 and
12 \$38,800—using 5-year inflation adjusted average for Fiscal Year 2007-2008 and
13 Fiscal Year 2008-2009 respectively.

14 DRA accepts CWS estimates of \$38,100 and \$38,800 for Fiscal Year 2007-
15 2008 and Fiscal Year 2008-2009 respectively.

16 **D. CONCLUSION**

17 Table 3-A reflects the reasonableness of DRA methodology and analysis of
18 CWS O & M expenses.

TABLE 3-1

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

OPERATION & MAINTENANCE EXPENSES

Item	TEST YEAR		2007 - 2008	
	DRA	CWS	CWS exceeds DRA	
			Amount	%
	(Thousands of \$)			
<u>At present rates</u>				
Operating Revenues	2,463.8	2,463.8		
Uncollectible rate	<u>0.69629%</u>	<u>0.69629%</u>		
Uncollectibles	17.2	17.2	0.0	0.0%
<u>Operation Expenses</u>				
Purchased Water	70.0	79.3	9.3	13.3%
Replenishment Assessment	0.0	0.0	0.0	0.0%
Groundwater Extraction Charges	0.0	0.0	0.0	0.0%
Purchased Power	218.5	218.5	0.0	0.0%
Purchased Chemicals	58.5	63.1	4.6	7.9%
Payroll	425.8	425.8	0.0	0.0%
Postage	14.9	14.9	0.0	0.0%
Transportation	47.1	47.1	0.0	0.0%
Uncollectibles	17.2	17.2	0.0	0.0%
Source of Supply	26.0	26.0	0.0	0.0%
Pumping	6.5	6.5	0.0	0.0%
Water Treatment	37.7	46.6	8.9	23.7%
Transmission & Distribution	19.9	19.9	0.0	0.0%
Customer Accounting	41.5	41.5	0.0	0.0%
Conservation	5.7	5.7	0.0	0.0%
Total Operation Expenses	<u>989.2</u>	<u>1,011.9</u>	<u>22.7</u>	<u>2.3%</u>
<u>Maintenance Expenses</u>				
Payroll	50.8	50.8	0.0	0.0%
Transportation	7.9	7.9	0.0	0.0%
Stores	1.9	7.8	5.9	319.4%
Contracted Maintenance	38.1	38.1	0.0	0.0%
Total Maintenance Expense	<u>98.7</u>	<u>104.5</u>	<u>5.8</u>	<u>5.9%</u>
Total O & M Expenses (incl uncoll)	1,087.8	1,116.3	28.4	2.6%
<u>At proposed rates</u>				
Operating Revenues	3,464.6	3,464.6		
Uncollectible rate	<u>0.69629%</u>	<u>0.69629%</u>		
Uncollectibles	24.1	24.1		
Total O & M Expenses (incl uncoll)	1,094.8	1,123.2	28.4	2.6%

1 CHAPTER 4: ADMINISTRATIVE & GENERAL EXPENSES

2 A. INTRODUCTION

3 This chapter sets forth DRA's analysis and recommendations for California
4 Water Service Company's A & G expenses including Payroll, Transportation
5 Expenses, Rent, Administrative Charges Transferred, Non-specifics, Amortization
6 of Limited Term Investments, and Dues and Donations Adjustments. All of
7 DRA's estimates are in Nominal Dollars. A comparison of total expense estimates
8 for Fiscal Years 2007 – 2008, and is presented in Table 4-1.

9 B. SUMMARY OF RECOMMENDATIONS

10 DRA's estimated total for A&G expenses is \$153,900 for Fiscal year 2007-
11 2008. CWS' estimate for the same time period is \$159,400 or 3.6% more than
12 DRA's. DRA's estimated total for A&G expenses is \$157,000 for Fiscal Year
13 2008 – 2009. Cal Water's estimate for the same time period is \$164,600, or 4.8%
14 more than DRA's.

15 C. DISCUSSION

16 DRA conducted independent analysis of CWS' work papers and methods
17 of estimating the Administration & General expenses. Other DRA witnesses
18 recommended disallowing the intangible plant portion of this district's expenses,
19 which are reflected in the Amortization of Limited Term Investment expenses, for
20 the years 2006 through 2009. The differences in payroll are due to the
21 adjustments made to total payroll as discussed in Chapter 3. DRA accepted the
22 company's allocation factors for A&G payroll.

23 Concerning the Extended Service Protection, or ESP program, included as
24 the Administrative Charge Transferred; DRA adjusted it based upon the fact that
25 CWS used 2005 numbers for Residential Metered and Flat Rate hookups. DRA
26 decided to use Metered and Flat Rate forecasted residential hookups for 2006,

1 because it reflects more recent data. The differences are small, therefore DRA
2 accepted CWS' estimate.

3 The inflation factors used by DRA are recommended by the Commission's
4 Office of Ratepayers Advocates (DRA) Energy Cost of Service Branch (ECOS),
5 which has traditionally handled inflation issues for the Commissions. These
6 factors were provided in a memorandum from ECOS dated August 31, 2006. The
7 Labor escalation factors are the Consumer Price index for all Urban Consumers
8 (CPI-U). The Non-Labor escalation factors are generated from a composite index
9 of 10 Wholesale Price indexes for material and supply expenses, and the CPI-U
10 weighted 5% for services and consumer related items. The 60/40 factor is a
11 composite index derived from weighting 60 percent Non-Labor and 40 percent for
12 the Compensation per Hour Index. These indices are derived from monthly DRI-
13 WEFA publication, "U.S. Economic Outlook." The above indices and weightings
14 are in conformance with an agreement reached between the Commission's Water
15 Division and the California Water Association under the new rate case plan
16 adopted in D.04-06-018. See Table 4-A.

TABLE 4 - A: ESCALATION FACTORS									
		Compensation		Inflation Rates (%)				Composite Rates %	
		per hour						40/60 Split	
		Non-Farm Rate:							
Year		Calender	Fiscal	Calender		Fiscal		Calendar	Fiscal
		Annual %	Annual %	Non-	Labor	Non	Labor		
		Changes:	Changes:	Labor		Labor			
1997		3.6	4.5	0.6	--	0.3	--	1.8	2
1998		5.3	4.9	0	2.3	0.4	1.9	2.1	2.2
1999		4.4	5.7	0.7	1.5	2.1	1.9	2.2	3.5
2000		6.9	4.8	3.5	2.2	1.8	2.8	4.9	3
2001		2.7	2.8	0	3.4	0	3.1	1.1	1.1
2002		2.8	3.4	0	2.8	1.3	2.2	1.1	2.1
2003		4	4.3	2.5	1.6	4.2	2	3.1	4.2
2004		4.5	4.8	5.8	2.3	5.7	2.5	5.3	5.3
2005		5.1	4.4	5.5	2.7	5.7	3.1	5.3	5.2
2006		3.7	3.8	5.9	3.4	4.4	3.5	5	4.2
2007		3.9	3.9	2.8	3.6	1.8	3.1	3.2	2.6
2008		3.8	3.9	0.7	2.5	0.4	2.2	1.9	1.8
2009		4	4.1	0.1	1.8	0.1	1.8	1.7	1.7
2010		4.1	--	0	1.7	--	--	1.6	--

1

2

D. CONCLUSION

3

DRA recommends adopting DRA's numbers for this district.

TABLE 4-1

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

ADMINISTRATIVE & GENERAL EXPENSES

TEST YEAR 2007 - 2008

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>At present rates</u>				
Oper. Rev. less uncoll.	2,446.6	2,446.6		
Local Franchise Rate	0.0000%	0.0000%		
Franchise tax	0.0	0.0	0.0	0.0%
Payroll	90.8	96.3	5.5	6.1%
Transportation Expenses	0.0	0.0	0.0	0.0%
Rent	21.1	21.1	0.0	0.0%
Admin Charges Trsf	(0.5)	(0.5)	0.0	0.0%
Nonspecifics	41.1	41.1	0.0	0.0%
Amort of Limited Term Inv.	2.0	2.0	0.0	0.0%
Dues & Donations Adjustment	(0.6)	(0.6)	0.0	0.0%
Total A & G Expenses (incl. local Fran.)	153.9 153.9	159.4 159.4	5.5 5.5	3.6% 3.6%
<u>At proposed rates</u>				
Oper. Rev. less uncoll.	3,440.5	3,440.5		
Local Franchise Rate	0.0000%	0.0000%		
Fran. tax	0.0	0.0	0.0	0.0%
Total A & G Expenses (incl. local Fran.)	153.9 153.9	159.4 159.4	5.5 5.5	3.6% 3.6%

1 **CHAPTER 5: TAXES OTHER THAN INCOME**

2 **A. INTRODUCTION**

3 This chapter sets forth DRA's analysis and recommendations of Taxes
4 Other Than Income" for CWS for Fiscal Years 2007 – 2008, and 2008 – 2009.
5 Taxes Other Than Income include ad valorem tax (property tax), business licenses,
6 franchise, and payroll taxes. Ad valorem taxes are property taxes paid on net
7 utility plant. Payroll taxes generally include social security tax, Federal Insurance
8 Contribution ACT (FICA) tax consisting of Old Age Benefits and Medicare,
9 Federal Unemployment Insurance (FUI), State Unemployment Insurance (SUI).

10 DRA's and CWS estimates of Taxes Other Than Income for Fiscal Years
11 2007-2008, are included in Table 5-1 at the end of the chapter.

12 **B. SUMMARY OF RECOMMENDATIONS**

13 DRA agrees with the methodology that CWS proposes using to determine
14 the estimated expenses for Fiscal Year 2007-2008, and 2008-2009 for ad valorem
15 taxes. Additional differences in the taxes, or fees are due to differences between
16 DRA and CWS estimates of plant additions. A comparison of DRA's and the
17 company's estimates is shown in Table 5-1.

18 **C. CONCLUSION**

19 1) Ad Valorem Taxes - Differences between DRA and CWS are
20 attributable to the differences in Plant estimates.

21 2) Payroll Taxes – There is no difference in payroll taxes.

22 DRA recommends accepting CWS' numbers for 2007 – 2008, and adopting
23 its numbers for this district for 2008 - 2009. See Table 5-1.

TABLE 5-1
CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

TAX DEDUCTIONS AND CREDITS

TEST YEAR 2007 - 2008

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Ad Valorem taxes	54.7	65.8	11.1	20.3%
Local Franchise (pres rates)	0.0	0.0	0.0	0.0%
Local Franchise (prop rates)	0.0	0.0	0.0	0.0%
Social Security Taxes	45.1	45.1	0.0	0.0%
Business License (pres rates)	0.1	0.1	0.0	0.0%
Business License (prop rates)	0.1	0.1	0.0	0.0%
Taxes other than income (present rates)	99.9	111.0	11.1	11.1%
Taxes other than income (proposed rates)	99.9	111.0	11.1	11.1%
State Tax Depreciation	379.1	410.0	30.9	8.1%
Transp. Dep. Adj.	(27.5)	(27.5)	0.0	0.0%
State Tax Deduct(pres rates)	351.6	382.5	30.9	8.8%
State Tax Deduct(prop rates)	351.6	382.5	30.9	8.8%
Federal Tax Depreciation	275.0	297.4	22.4	8.1%
State Income Tax	17.5	17.5	0.0	0.0%
Transp. Dep. Adj.	(27.5)	(27.5)	0.0	0.0%
Pre. Stock Div. Credit	0.7	0.7	0.0	0.0%
Am. Jobs Act Deduction	10.7	10.7	0.0	0.0%
Fed. Tax Deduct.(pres rates)	265.7	288.1	22.4	8.4%
Fed. Tax Deduct.(prop rates)	283.6	306.0	22.4	7.9%

1 **CHAPTER 6: INCOME TAXES**

2 **A. INTRODUCTION**

3 This chapter presents DRA’s analysis of Income Taxes for the Oroville
4 District of California Water Service Company. Tables 6-1 and 6-2 compare in
5 detail DRA’s and CWS’ tax deductions and taxes estimates for the Fiscal Year
6 2007 – 2008 and the escalation Year 2008 – 2009.

7 **B. SUMMARY OF RECOMMENDATIONS**

8 DRA agrees with the methods CWS used to calculate Income Tax.

9 DRA’s Lower O&M expenses, A&G, Prorated Expenses and interest
10 calculations have made a difference in the final tax estimates. The differences are
11 due to difference in Operation and Maintenance expenses, A&G Payroll, Prorated
12 Expenses; and Average rate base and the Cap. Interest.

13 **C. DISCUSSION**

14 The tax deductions and credits in this proceeding were calculated in
15 accordance with the normalization requirements of the Economic Recovery Act of
16 1981 (ERTA). Further, the provisions of the Tax Equity and Fiscal Responsibility
17 Act of 1982 (TEFRA) have been incorporated in the tax deduction estimates.
18 Finally, the provisions of the Tax Reform Act of 1986 (TRA 86) have been
19 estimated and included into the general rate case in accordance with the
20 requirements of Decision 87-09-026 dated September 10, 1987, Decision 87-12-
21 028 dated December 9, 1987 and Decision 88-01-061 dated January 28, 1988.

22 Some of the provisions of TRA 86 have been incorporated into California
23 Corporation Franchise Tax (CCFT) law in the California Bank and Corporation
24 Tax Fairness, Simplification and Conformity Act of 1987 (State Tax Act of 1987).

1 The provisions have been estimated and integrated into the CCFT calculations for
2 this general rate case.

3 DRA calculated tax depreciation for state and federal income tax purposes
4 by applying the ratio of DRA's estimate of net plant to CWS' estimate of net plant
5 to CWS' tax depreciation estimate. This methodology will be trued up when a
6 Commission decision is issued in this case.

7 To calculate the interest deduction, DRA used its ratebase and multiplied it
8 by the weighted cost of debt, whereas CWS reduced the ratebase by working cash
9 before multiplying by the weighted cost of debt. DRA followed the policy
10 outlined in D.03-12-040. Because Working Cash is a part of ratebase and
11 therefore should be considered when calculating the deduction for interest on debt
12 during the calculation of income taxes.

13 Decision 89-11-058 issued on November 22, 1989 requires that for
14 ratemaking purposes the prior year's CFFT should be used in the calculation of
15 Fiscal Year 2005-2006 and the escalation Year 2006-2007 Federal Income Tax
16 (FIT). The tax requirements of that decision have been incorporated in this
17 general rate case by both DRA and CWS. The prior year's CCFT was used as a
18 deduction in arriving at the Fiscal Year 2007-2008 and the escalation Year 2008-
19 2009 estimated FIT.

20 Corporations may deduct dividends paid on special preferred stock issues
21 or issues made to redeem such preferred stock. The Preferred Stock Dividend
22 Credit tax deduction is reflected in DRA's calculations.

23 CWS has also applied the tax incentive on production from the American Job
24 Creation Act of 2003 on CWS table 7-C. DRA agrees.

TABLE 6-1
CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

TAXES BASED ON INCOME

TEST YEAR 2007 - 2008

(PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	2,463.8	2,463.8	0.0	0.0%
Deductions:				
O & M expenses	1,087.8	1,116.3	28.4	2.6%
A & G expenses	153.9	159.4	5.5	3.6%
G. O. Prorated expenses	442.6	466.5	23.9	5.4%
Taxes not on Income	99.9	111.0	11.1	11.1%
Transportation Deprec Adj	(27.5)	(27.5)	0.0	0.0%
Interest	181.4	193.8	12.5	6.9%
Income before taxes	525.7	444.3	(81.4)	-15.5%
<u>Calif. Corp. Franchise Tax</u>				
State Tax Deductions	(379.1)	(410.0)	-30.9	8.1%
Taxable income for CCFT	146.6	34.3	(112.3)	-76.6%
CCFT Rate	8.84%	8.84%		
CCFT	13.0	3.0	(9.9)	-76.6%
Addl. Tax .06% per D.84-05-036	0.0	0.0	0.0	0.0%
Adjusted CCFT	13.0	3.0	(9.9)	-76.6%
<u>Federal Income Tax</u>				
Tax Depreciation	275.0	297.4	22.4	8.1%
State Corp Franch Tax	17.5	17.5	0.0	0.0%
Pref Stock Dividend Credit	0.7	0.7	0.0	0.0%
Am. Jobs Act Deduction	10.7	10.7	0.0	0.0%
Taxable income for FIT	221.8	128.8	(93.0)	-41.9%
FIT Rate	35.00%	35.00%		
FIT	77.6	45.1	(32.6)	-41.9%
Total FIT & CCFT	90.6	48.1	(42.5)	-46.9%

TABLE 6-2
CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

TAXES BASED ON INCOME

TEST YEAR 2007 - 2008

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	3,464.6	3,464.4	(0.2)	0.0%
Deductions:				
O & M expenses	1,094.8	1,123.2	28.4	2.6%
A & G expenses	153.9	159.4	5.5	3.6%
G. O. Prorated expenses	442.6	466.5	23.9	5.4%
Taxes not on Income	99.9	111.0	11.1	11.1%
Transportation Deprec Adj	(27.5)	(27.5)	0.0	0.0%
Interest	181.4	193.8	12.5	6.9%
Income before taxes	1,519.5	1,437.9	(81.6)	-5.4%
<u>Calif. Corp. Franchise Tax</u>				
State Tax Deductions	(379.1)	(410.0)	-30.9	8.1%
Taxable income for CCFT	1,140.4	1,028.0	(112.4)	-9.9%
CCFT Rate	8.84%	8.84%		
CCFT	100.8	90.9	(9.9)	-9.9%
Addl. Tax .06% per D.84-05-036	0.0	0.0	0.0	0.0%
Adjusted CCFT	100.8	90.9	(9.9)	-9.9%
<u>Federal Income Tax</u>				
Tax Depreciation	275.0	297.4	22.4	8.1%
State Corp Franch Tax	35.4	35.4	0.0	0.0%
Pref Stock Dividend Credit	0.7	0.7	0.0	0.0%
Am. Jobs Act Deduction	10.7	10.7	0.0	0.0%
Taxable income for FIT	1,197.8	1,093.8	(103.9)	-8.7%
FIT Rate	35.00%	35.00%		
FIT	419.2	382.8	(36.4)	-8.7%
Total FIT & CCFT	520.0	473.7	(46.3)	-8.9%

CHAPTER 7: PLANT IN SERVICE

A. INTRODUCTION

This Chapter provides DRA's assessment of utility plant in service. DRA and CWS estimates for capital investment expenditures for Test Year 2007-2008 and Escalation Year 2008-2009 are provided in Tables 7-1 and 7-2 at the end of this Chapter.

DRA reviewed and analyzed CWS' testimony, application, work-papers, master data request responses, capital project justifications, cost estimates, and responses to DRA data requests. DRA requested detailed explanation of the CWS' Depreciation methodologies and a demonstration of the hydraulic model. During August 2006, DRA conducted a field investigation of many of the proposed specific plant additions before making its independent recommendations.

B. SUMMARY OF RECOMMENDATIONS

1) DRA recommends Gross Additions of \$625,800 for the Oroville District for Test Year 2007-2008 and \$411,000 for Test Year 2008-2009. Table 7-A compares DRA's capital investment budget recommendations with the final CWS capital budget requests.

Table 7-A

**California Water Service Company
Oroville District
Budget for Capital Investment Projects
(\$ Dollars in Thousands)**

		<i>DRA</i>	<i>CWS</i>	<i>\$ Diff.</i>	<i>% Diff</i>
2007-2008	Non-Specific	\$ 82	\$ 86	\$ (4)	-5%
2007-2008	Specific	\$ 527	\$ 1,536	\$ (1,010)	-66%
<i>Total</i>		\$ 608	\$ 1,622	\$ (1,014)	-63%
2008-2009	Non-Specific	\$ 83	\$ 93	\$ (10)	-11%
2008-2009	Specific	\$ 308	\$ 740	\$ (432)	-58%
<i>Total</i>		\$ 391	\$ 833	\$ (442)	-53%

The main differences between the two estimates are due to CWS' inconsistent use of overhead rates and contingencies, DRA's different interpretations of similar recent cost estimates and DRA not approving the major *Cryptosporidium* disinfection project.

C. DISCUSSION

1) DRA reviewed submittals provided by CWS including the Application, Master Data Request Responses, work papers, and responses to DRA Data Requests. DRA conducted field trips in the district and visited job sites of projects previously completed or planned for future construction.

2) The average utility plant additions for Oroville District have been about \$393,000 for the past five years covering 2001 through 2005¹. The budget request for the period of 2006-2008 is significantly greater than recent history primarily due to water supply improvement projects such as replacing a flume or

¹ California Water Service Company Oroville District Master Data Request, Rate Base Attachment, RB1.

increasing access to water from the State Water Project, *Cryptosporidium* deactivation equipment for the water treatment plant, main replacement projects, and developing a water facilities master plan with an upgraded hydraulic model.

3) DRA concurs with the 2007-2008 projects submitted by CWS with the exception that DRA recommends adjustments to two specific projects and the non-specifics budget. These adjustments are listed in Table 7-B and described in paragraphs 5) through 8).

Table 7-B

California Water Service Company

Oroville District

DRA Exceptions to 2007 Capital Expenditures Budget
(\$ Dollars in thousands)

Project		DRA	CWS	\$ Diff
12665	Electrical	\$0	\$ 70	\$ 70
12665	Purification - Other	\$0	\$ 939	\$ 939
<i>Subtotal Specifics</i>				\$ 1,010
<i>Subtotal Non specifics</i>		\$ 72	\$ 86	\$ 14

4) Overview of Projects 12665, 12143, and 14726 –

As early as 1922, the community around Oroville had established irrigation districts². Thermalito Irrigation District (TID) purchased water from PG&E that was delivered to TID via the Powers Ditch that is now part of California Water Service Company (CWS) facilities. Powers Ditch extends from Coal Canyon

² According to the Draft Environmental Assessment of Oroville Facilities associated with FERC Project No. 2100.

1 Power House of PG&E in Butte County to a CWS reservoir in Oroville³. The
2 name of the diversion point from PG&E is named the Coal Canyon Afterbay.

3 During 1927, PG&E sold Oroville's municipal water system to Cal Water.
4 According to PG&E, PG&E was obliged to deliver 46.6 cfs to CWS to satisfy the
5 agreement to deliver water to Thermalito Irrigation District over the Powers
6 Canal⁴.

7 Flume F is part of the Powers Canal system that conveys raw water from
8 the foothills of Paradise into Oroville to the Water Treatment plant at Station 15.
9 According to CWS, the wooden flume is old and due to age and deterioration, in
10 poor structural condition with severe leaks and requires replacement at a cost of
11 \$326,200. According to 2006 Project Justification #12143 for Flume F
12 Replacement Project, CWS is discussing with PG&E whether to continue to use
13 water supplied by PG&E and delivered through the existing canal, or whether to
14 purchase from an alternate conveyance system. CWS is also considering
15 purchasing water from the State Water Project. If CWS decides to purchase water
16 from the State Water Project, then CWS will propose to proceed with 2008 Project
17 #14726 that involves construction of a retaining wall at Station 14, next to the
18 State Water Project, and installing a generator.

19 According to the DRA field trip, part of Flume F is on an Oroville ranch
20 located off Table Mountain Road. The ranch owners run cattle during the winter,
21 and then transport them to Greenville, California where they graze for the summer.
22 CWS personnel on the field trip notified us that cattle can get into the Powers
23 Canal and that building a fence would not be cost effective.

³ State of California Department of Transportation master agreement with CWSC, Exhibit 13-EX-18B.

⁴ Hydrodivestiture Draft EIR, Appendix D, page D-35, Table D-5, Summary of Water-Related Contracts involving PG&E.

1 Project #12665 involves installing two parallel ultraviolet (UV) disinfection
2 units to deactivate *Cryptosporidium*. CWS proposes to install these ultraviolet
3 disinfection treatment units at the Oroville water treatment plant. During the DRA
4 field trip to Oroville District, CWS indicated that the company was taking a
5 proactive approach regarding its surface water quality and the plans involve
6 installing this \$939,400 UV disinfection system for the finished water exiting the
7 water treatment plant.

8 **5) Project 12665 Two Parallel UV Disinfection Units to**
9 **Deactivate *Cryptosporidium* and Electrical Equipment**
10 **Associated with *Cryptosporidium* Deactivation**

11 CWS proposes to install a new ultraviolet (UV) disinfection treatment unit
12 on the water treatment plant. CWS' stated purpose for the project includes:

13
14 "...This project will install a new Ultraviolet (UV)
15 Disinfection treatment unit on the water treatment
16 plant at Oroville to inactivate cryptosporidium. The
17 installation of this unit is the most cost effective
18 alternative to protect the public from
19 cryptosporidium."... "Cryptosporidium is an oocyst
20 protozoan routinely found in surface waters which is
21 resistant to conventional disinfection and once
22 ingested can cause severe illness especially in immune
23 compromised individuals⁵..."

24
25 DRA recommends the Commission *not* approve \$939,000 for CWS'
26 requested *Cryptosporidium* disinfection units and \$70,000 in associated electrical
27 equipment during the period covered by this GRC. The company's decision to
28 install this equipment appears to be premature. According to consultant's reports
29 provided by CWS, the raw water source is of extremely good bacteriological

⁵ California Water Service Company, Project Justifications for 2006 General Rate Case (GRC)
Oroville District, Project #12665, page 16.

1 quality. To date, no raw water samples from the Powers Canal have tested
2 positive for *Cryptosporidium*. While there is a potential for the source water to
3 become contaminated because it passes through land where cattle grazing occurs,
4 CWS has not yet determined whether any mitigation such as different watershed
5 management i.e., moving cattle, fencing the canal, moving the water intake, etc,
6 would be appropriate in lieu of installing UV disinfection at the water treatment
7 plant. And, although *Cryptosporidium* and *Giardia* are known to infect cattle,
8 CWS does not know whether or not the Table Mountain Ranch cattle are infected
9 with *Cryptosporidium* because the rancher indicated that the ground has never
10 been tested for it⁶. CWS has not yet determined whether to continue drawing raw
11 water from the Powers Canal or to draw it from the State Water Project.

12 At this time (2006 through 2008), CWS is not required by State of
13 California, its agencies, nor by any federal agency to install the UV equipment⁷.
14 EPA regulations for mitigating the effects of protozoans (such as
15 *Cryptosporidium*) in ground water require water source monitoring prior to
16 determining mitigations and allow time up until September 30, 2013 to install the
17 treatment options.

18 DRA recommends that CWS first establish whether or not sufficient
19 *Cryptosporidium* threat exists to justify the addition of supplemental disinfection
20 barriers. CWS should first perform the LT2ESWTR-required source water
21 monitoring to determine its bin classification, and then submit a request for
22 additional water treatment equipment during a future General Rate Case
23 proceeding.

⁶ California Water Services Response to DRA Data Request JWS-3, dated September 14, 2006, response to question 5.

⁷ Ibid, response to question 25.

1 The U.S. Environmental Protection Agency (EPA) published the Long
2 Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) on January 5,
3 2006. The LT2ESWTR improves control of microbial pathogens. The
4 LT2ESWTR requires source water monitoring at public water systems that use
5 surface water or ground water under the direct influence of surface water. Based
6 on system size and filtration type, systems need to monitor for *Cryptosporidium*,
7 *E. coli*, and turbidity⁸. Because the Oroville District obtains some of its water
8 from the Powers Canal or from the State Water Project, Oroville is subject to the
9 LT2ESWTR requirements.

10 The LT2ESWTR organizes the water treatment requirements into four
11 different “bin” classifications based on initial *Cryptosporidium* concentrations.
12 The bin classification determines whether further treatment for *Cryptosporidium* is
13 required. The concentrations of *Cryptosporidium* found in source water
14 monitoring determine the treatment requirements. According to the Annual
15 Inspection Report filed by Department of Health Services dated December 14,
16 2004, the approximate population served by Oroville District is 11,748 people,
17 assuming that each service connection serves 3.3 people⁹. LT2ESWTR requires
18 companies that operate filtered systems serving at least 10,000 people to collect
19 samples monthly for 24 months. This first round of source water monitoring must
20 begin by April 2008. CWS must submit its bin classification to EPA by
21 September 2010. The bin classification determines whether further treatment for
22 *Cryptosporidium* is required. CWS must comply with additional LT2ESWTR

⁸ LT2ESWTR Source Water Monitoring for Systems Serving At Least 10,000 People Factsheet, EPA 816-F-06-017 dated June 2006, downloaded on September 22, 2006, from www.epa.gov/safewater/disinfection/lt2

⁹ California Water Service Company Testimony of Chet W. Auckly for the Oroville District, dated July 2006, Schedule Auckly-3, page 1, paragraph A.3.

1 treatment technique requirements, such as installing additional treatment methods,
2 by October 1, 2013.

3 Alternately, LT2ESWTR allows that CWS may notify EPA or the State,
4 that CWS is electing to not conduct water monitoring and commit to providing the
5 maximum treatment of 5.5 log removal or inactivation of *Cryptosporidium*. If
6 CWS was intending to utilize this clause of the regulation, they did not explicitly
7 state it; neither did they provide any accompanying justification comparing the
8 costs and benefits of this option versus conducting formal source water
9 monitoring.

10 CWS has not yet started the formal source water monitoring to determine
11 the level of mitigation required by US EPA to eliminate *Cryptosporidium*. There
12 have not been any confirmed cases of *Cryptosporidium* illness in Oroville¹⁰.
13 Additionally, the Butte County Environmental Health Department could not recall
14 whether there had been any confirmed cases illnesses due to coliform bacterial
15 contamination of water supplies in Butte County or in the CWS water supply¹¹.

16 To date, no raw water samples from the Powers Canal
17 have tested positive for *Cryptosporidium*. However,
18 the canal may be susceptible to future contamination
19 as it passes through cattle grazing land¹².

20 The quality of the source is also good with respect to
21 presence of organic contaminants. Operating
22 personnel report there has been no difficulty meeting
23 the Disinfectant/Disinfection By-Products standards or
24 those covering the haloacetic acid contaminants.
25 Additionally, the raw water source is of extremely

¹⁰ California Water Service Response to DRA Data Request JWS-3, dated September 14, 2006, response to question 3.

¹¹ Ibid, response to question 4.

¹² Ibid, response to question 8.

1 good bacteriological quality. The only major source
2 for bacteriological contamination is from inflow into
3 the canal that supplies the treatment plant¹³.

4 Although the existing facilities meet all current
5 drinking water quality standards there is concern that
6 future regulations may require the CWS to upgrade the
7 existing plant or install additional treatment processes
8 to achieve compliance with new standards.
9 ...However, according to the proposed standards, if the
10 *Cryptosporidium* concentrations are less than

11 0.075 organisms/liter, no additional treatment is
12 needed. If sampling and monitoring detect
13 *Cryptosporidia* in the raw water supply at
14 concentrations above 0.075 organisms per liter as
15 much as 2.5 logs of additional treatment capability
16 must be provided to meet the new regulations. Even
17 though previous analyses of the raw water source have
18 not detected the presence of *Cryptosporidium*, this
19 particular new standard will require heightened levels
20 of monitoring. The fact that the open canal is
21 unfenced in some locations and passes through cattle
22 grazing land, increases the concern that there is a
23 potential for *Cryptosporidium* contamination¹⁴.

24 Hence, CWS has decided to include additional
25 treatment barriers to enhance *Cryptosporidium*
26 inactivation at the Oroville plant, which includes the
27 installation of UV. UV can provide from 0.5 to 3.0
28 logs of additional treatment when coupled with
29 conventional treatment¹⁵.

30 *Cryptosporidium* and *Giardia* vulnerability in the State
31 Water Project water is unknown. However, Oroville

¹³ CWS Response to DRA Data Request JWS-3, which included Preliminary Water Treatment Assessment, Oroville Water Treatment Plant, Dated January 2006, performed by SPH Associates Consulting Engineers of Cameron Park, CA, pg 1-1.

¹⁴ pp 1-1 to 1-3, SPH Associates.

¹⁵ California Water Service Response to DRA Data Request JWS-3, dated September 14, 2006, response to question 8.

1 will be subject to the recently promulgated
2 LTZBSWTR Rule. The LT2ESWTR requires all
3 systems that use surface water or GWUDI to conduct
4 source monitoring to determine average
5 *Cryptosporidium* concentrations. Based on the average
6 source water *Cryptosporidium* concentration, systems
7 will be classified in one of four possible bins. A
8 system's bin assignment determines the extent of any
9 additional *Cryptosporidium* treatment requirements.
10 The rule requires systems to comply with additional
11 treatment requirements by using one or more
12 management techniques from a "toolbox" of options
13 ¹⁶.

14 CWS engaged the consulting services of CH2Mhill to evaluate various
15 technologies to enhance inactivation/removal of *Cryptosporidium* at Oroville ...
16 As part of this project, UV, micro-filtration, and ozone were evaluated. Based on
17 the report, the consultant recommended that UV was the most cost effective
18 treatment approach for *Cryptosporidium* control at Oroville.

19 CWS has not yet investigated other management techniques, such as
20 eliminating use of the Powers Canal or moving the cattle so that the water supply
21 is less likely to get contamination from cattle wastes.

22 However, as part of the LT2ESWTR and as mentioned
23 in response #9, Oroville will have to conduct extensive
24 *Cryptosporidium* source water monitoring. In addition,
25 Oroville plans to install UV regardless of its
26 LT2ESWTR bin classification to be proactive
27 regarding public health and utilize UV as a multiple
28 barrier approach for *Cryptosporidium* control. In
29 addition, based on the LT2ESWTR monitoring results,
30 CWS may pursue additional *Cryptosporidium* credits
31 through watershed control programs and/or alternative
32 source/intake management strategies¹⁷.

¹⁶ CWS Response dated September 14, 2006 to DRA Data Request JWS#3, question 9.

¹⁷ Ibid, question 14.

1 Incorporating additional treatment barriers to comply
2 with the *Cryptosporidium* inactivation standard would
3 be a prudent measure to guard against a possible
4 contamination occurrence. A source water quality
5 monitoring program required by the pending
6 regulations will establish whether sufficient
7 *Cryptosporidium* threat exists to justify the addition of
8 supplemental disinfection barriers to comply with the
9 standards. It should be recognized that a well planned
10 water quality monitoring program will not necessarily
11 detect the presence of *Cryptosporidium* organisms.
12 Rather, to provide the highest level of protection, CWS
13 may want to install either UV disinfection, ozone
14 oxidation or chlorine dioxide treatment when other
15 plant improvements are implemented¹⁸.

16 DRA does not recommend allowing the expenditures for both of these
17 projects because CWS is proposing to install these mitigations in advance of
18 regulatory schedules and in advance of water source monitoring to determine the
19 extent of *Cryptosporidium* oocysts present in the water. According to the
20 Environmental Protection Agency implementation guidelines, water systems such
21 as Oroville have until 2013 to install mitigations that address *Cryptosporidium*.

22 DRA recommends that CWS first pursue the monitoring and water testing
23 required by the EPA. After CWS completes that testing they may submit
24 recommendations for appropriate water treatment during a future GRC
25 proceeding.

26 DRA questioned CWS about the impact of delaying the installation of the
27 UV disinfection system until the next rate case. CWS responded:

28 “There are no regulatory consequences of delaying the
29 installation of UV. However, CWS is trying to be

¹⁸ CWS Response to DRA Data Request JWS-3, which included Preliminary Water Treatment Assessment, Oroville Water Treatment Plant, Dated January 2006, performed by SPH Associates Consulting Engineers of Cameron Park, CA, page 3-2.

1 proactive in dealing with Cryptosporidium occurrence
2 and UV would serve as a multiple barrier in the
3 Oroville treatment process. For the Oroville plant, UV
4 facilities could be installed relatively easily for a
5 moderate cost. It is anticipated the Cal DHS would
6 assign the maximum log credit to the combined
7 treatment system¹⁹.”.

8 DRA conferred with the sanitation engineers in the Department of Health
9 Services, Drinking Water Program, District Office that monitors Oroville District.
10 From that discussion, DRA learned:

11 “While (DHS) would support the use of ultraviolet
12 (UV) radiation as an additional barrier against
13 pathogens at any surface water treatment plant,
14 including Cal Water’s Oroville facility, the company is
15 not required by regulation or by Department directives
16 to install UV disinfection at this time. A new rule
17 (Long-term 2 Enhanced Surface Water Treatment
18 Rule) recently adopted by USEPA may eventually
19 result in Cal Water Oroville addressing pathogens
20 (e.g., Cryptosporidium species) differently than is
21 currently done²⁰.”.

22 **6) Non-Specific Budget Category – 2007-2008**

23 CWS proposes \$85,800 for the 2007 non-specific capital budget. CWS
24 uses a four-step process to adjust recorded data for inflation, calculate a three-year
25 arithmetic mean, trend constant dollar mean values, and apply inflation factors to
26 test year values²¹. DRA recommends using a ten-year average based on the actual
27 non-specific expenditures from 1996 to 2005 to estimate the non-specific capital
28 budget and provides a cost estimate of \$81,600.

¹⁹ CWS Response to DRA Data Request JWS-3, questions 19-21.

²⁰ Email dated September 5, 2006 from Associate Sanitary Engineer, DHS Drinking Water Field Operations Branch to Utilities Engineer, DRA Water.

²¹ CWS Report on the Results of Operation, for the Oroville District, page 48, paragraph 12.

DRA concurs with the 2008-2009 projects submitted by CWS with the exception that DRA recommends adjustments to 4 specific projects and the non-specifics budget. These adjustments are listed in Table 7-C and described in paragraphs 8) through 12).

Table 7-C

**California Water Service Company
Oroville District
DRA Exceptions to 2008 Capital Expenditures Budget
Dollars in Thousands**

<i>Project</i>	<i>Description</i>	<i>DRA</i>	<i>CWS</i>	<i>\$ Diff.</i>
14726	Retaining wall	\$0	\$ 43	\$ 43
14726	Generator	\$0	\$ 89	\$ 89
15235	Hydraulic Model	\$0	\$100	\$100
15235	Master Plan	\$0	\$200	\$200
<i>SUBTOTAL</i>		<i>\$0</i>	<i>\$432</i>	<i>\$432</i>

**7) Project 14726 – Retaining Wall and New Generator–
Station 14**

8) Project 12143 – Flume F Replacement Project

CWS proposes \$132,000 in Project 14726 to build a retaining wall at Station 14 and to install a generator. This project is contingent upon pending CWS decisions to determine whether or not to take more water supply from the Department of Water Resources State Water Project at CWS Station 14. Project 14726 is also related to 2006 Project 12143 – Replace Flume F of Powers Canal. CWS proposes \$326,200 to replace Flume F because the wooden flume constructed during the 1940s is in poor structural condition and is leaking. CWS has not yet determined whether to upgrade Station 14 to use the State Water Project as the primary raw water delivery point or to repair Flume F of Powers

1 Canal and continue to purchase water from PG&E²². For these reasons, DRA
2 recommends that once CWS makes a decision on the water supply project, then
3 either Project 12143 or Project 14726 should be submitted by Advice Letter due to
4 the uncertainty of decision-making surrounding these construction projects. The
5 estimated costs to install the generator set should be decreased from \$89,100 to
6 \$50,000 based on similar project # 15149. The estimate to install the retaining
7 wall for \$43,200 should be based on competitive bidding with a cap on the total
8 project cost for #14726 not to exceed \$93,200. The cap on Project 12143 should
9 be set based on a recent competitive bid, not to exceed \$326,200.

10 **9) Project 15235 – Hydraulic Model; Project 15235 – Water**
11 **Supply and Facilities Master Plan**

12 CWS proposes \$100,000 for consultants to update the Oroville District
13 hydraulic model and \$200,000 for consultants to develop the water supply and
14 facilities master plan. DRA concurs that long-term planning is an important
15 aspect of asset management and capital investment programs. However, DRA
16 does not concur with expenditures of \$300,000 for professional service
17 consultants. CWS provided insufficient analysis of alternatives to this expenditure
18 and provided insufficient justification of the cost benefit. DRA recommends not
19 approving the expenses for each project. D.04-04-041 supports DRA's
20 recommendation. In that case, CWS agreed to develop the water supply and
21 facilities master plan using in-house personnel without adding to the cost of
22 general office expenses.

23 "The parties disagreed about certain capital expenses,
24 especially those involving the preparation of water
25 supply and facilities master plans (WSMP) for each of
26 the four districts. The parties agreed that WSMP are

²² CWS Response to DRA Data Request JWS-2, dated September 11, 2006, response to question 5.

1 more critical for some districts than others and that
2 some of the plans can be prepared by CWS' in-house
3 personnel. Specifically, the parties agreed on the
4 recovery of costs for the preparation of the Dominguez
5 WSMP. CWS, however, will prepare in-house WSMPs
6 for Selma and Oroville without adding to the cost to
7 the test year budgets²³.

8 "In all districts in this proceeding, Cal Water requested
9 capital projects for water supply and facilities master
10 plans (WSMP). ORA recommended the Commission
11 disallow these projects mainly because it hadn't been
12 convinced of the need for the projects in all districts.
13 Both parties agreed that a WSMP had been completed
14 in 2001 in Palos Verdes. Furthermore, ORA contended
15 that water supply planning is already a routine part of
16 Cal Water's business. In its rebuttal, Cal Water
17 contended that these plans serve as a basis for facilities
18 construction and management for a twenty-year
19 horizon and will help Cal Water justify future capital
20 projects to the Commission. Cal Water further stated it
21 did not have the expertise in its engineering
22 department to complete these studies. Cal Water also
23 pointed out that these plans would be less expensive if
24 Cal Water had experienced personnel on staff to
25 complete the studies. After discussions, Cal Water and
26 ORA agree that WSMPs are prudent. However, ORA
27 and Cal Water now agree that the plans for Oroville
28 and Selma are less critical than for Dominguez-South
29 Bay. Therefore, ORA agrees to allow a one-time cost
30 in the 2004 capital budget of \$135,000 for the WSMP
31 in Dominguez-South Bay for \$135,000 in the 2004
32 capital budget. Cal Water will complete WSMPs for
33 Selma and Oroville with internal staff, but those
34 capital projects will not be included in the test year
35 budgets. Furthermore, ORA agrees that Cal Water
36 should hire without adding to the operating expenses
37 of the general office, the additional engineering

²³ CPUC Decision 04-04-041 dated April 22, 2004, page 16.

1 complement necessary to complete future WSMP
2 projects in-house²⁴”.

3 **10) Non-specific budget Category – 2008-2009**

4 CWS proposes \$92,800 for the 2008 non-specific capital budget. DRA
5 recommends using a ten-year average based on the actual non-specific
6 expenditures from 1996 to 2005 to estimate the non-specific capital budget and
7 provides a cost estimate of \$83,000.

²⁴ Ibid, Attachment A to the Settlement, page 8 of 24.

TABLE 7-1

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

PLANT IN SERVICE

TEST YEAR 2007 - 2008

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Plant in Service - BOY	12,060.6	12,060.6	0.0	0.0%
Additions				
Gross Additions	628.2	1,642.0	1,013.8	161.4%
Capitalized Interest	11.1	29.8	18.7	168.2%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	<u>(29.9)</u>	<u>(29.9)</u>	<u>0.0</u>	<u>0.0%</u>
Net Additions	609.4	1,641.9	1,032.5	169.4%
Plant in Service - EOY	12,670.0	13,702.5	1,032.5	8.1%
Weighting Factor	100%	100%		
Wtd. Avg. Plant in Service	12,670.0	13,702.5	1,032.5	8.1%

TABLE 7-2

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

PLANT IN SERVICE

ESCALATION YEAR 2008 - 2009

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Plant in Service - BOY	12,670.0	13,702.5	1,032.5	8.1%
Additions				
Gross Additions	411.0	853.1	442.1	107.5%
Capitalized Interest	7.1	15.2	8.1	113.8%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	<u>(72.3)</u>	<u>(72.3)</u>	<u>0.0</u>	<u>0.0%</u>
Net Additions	345.9	796.0	450.1	130.2%
Plant in Service - EOY	13,015.8	14,498.5	1,482.7	11.4%
Weighting Factor	100%	100%		
Wtd. Avg. Plant in Service	13,015.8	14,498.5	1,482.7	11.4%

1 **CHAPTER 8: DEPRECIATION EXPENSE AND RESERVE**

2 **A. INTRODUCTION**

3 This Chapter sets forth DRA's analyses and recommendations regarding
4 depreciation reserve and expense of Oroville District. The tables at the end of the
5 Chapter provide DRA's and CWS' estimates for Depreciation Reserve and
6 Expense for Test Year 2007-2008 and Escalation Year 2008-2009.

7 **B. SUMMARY OF RECOMMENDATIONS**

8 DRA agrees with the methods used to calculate depreciation reserve and
9 depreciation expense for Test Year 2007-2008 and Escalation Year 2008-2009.
10 Differences between DRA and CWS are due to different plant additions.

11 **C. DISCUSSION**

12 As part of its review, DRA compared the values reported in the GRC
13 application with CWS' annual reports to track beginning of year depreciation
14 reserves. CWS used the composite depreciation accrual rate of 3.07% based on a
15 straight-line remaining life curve using balances for this case consistent with
16 Standard Practice U-4. The differences between CWS and DRA's estimates are
17 related to the differences in plant additions.

18 **D. CONCLUSION**

19 DRA reviews and accepts CWS' methodology.

TABLE 8-1

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

DEPRECIATION RESERVE & EXPENSE

TEST YEAR 2007 - 2008

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	4,618.8	4,618.8	0.0	0.0%
Accruals				
Transportation Equipment	25.3	25.3	0.0	0.0%
Contributed Plant	27.7	27.7	0.0	0.0%
Other Plant in Service	320.7	336.6	15.9	5.0%
Total Accruals	373.7	389.6	15.9	4.3%
Retirements	(46.8)	(46.8)	0.0	0.0%
Depreciation Reserve - EOY	4,945.7	4,961.6	15.9	0.3%
Weighting Factor	100%	100%		
Wtd. Avg. Depr. Reserve	4,945.7	4,961.6	15.9	0.3%

1

TABLE 8-2

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

DEPRECIATION RESERVE & EXPENSE

ESCALATION YEAR 2008 - 2009

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	4,937.4	4,937.4	0.0	0.0%
Accruals				
Transportation Equipment	26.4	26.4	0.0	0.0%
Contributed Plant	28.3	28.3	0.0	0.0%
Other Plant in Service	337.7	385.4	47.7	14.1%
Total Accruals	392.4	440.1	47.7	12.2%
Retirements	(70.9)	(70.9)	0.0	0.0%
Depreciation Reserve - EOY	5,258.9	5,306.6	47.7	0.9%
Weighting Factor	100%	100%		
Wtd. Avg. Depr. Reserve	5,258.9	5,306.6	47.7	0.9%

1

CHAPTER 9: RATE BASE AND NET TO GROSS MULTIPLIER

A. INTRODUCTION

This Chapter sets forth DRA's analysis and recommendations of rate base for the Oroville District. Tables 9-1 and 9-2 at the end of this report compare DRA's and CWS' estimates. Differences are due to different estimates of plant additions, depreciation reserves and working cash allowances.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends a weighted average rate base for Oroville District as follows in Table 9-A below:

Table 9-A
California Water Service Company
Oroville District
Test Year 2007-2008
DRA Recommended Weighted Average Rate Base Summary

DRA Weighted Average Rate Base (\$000)	CWS Weighted Average Rate Base (\$000)	CWS Exceeds DRA Amount By (\$000)	CWS Exceeds DRA Amount By %
\$6,659.6	\$7,704.6	\$1,045.0	15.70%

Tables 9-1 and 9-2 at the end of this report provide a summary of DRA's weighted average rate base and depreciated rate base estimated for Oroville District.

C. DISCUSSION

1) Materials and Supplies

DRA accepted CWS' estimate of \$55,000 for materials and supplies after comparing the requested amount with the five-year average. CWS' request is lower than the five-year average amount.

2) Working Cash Allowance

In the previous GRC, CWS had not updated its lead/lag studies since the late 1980s. CWS managers had indicated to DRA that a project was underway to update the lead/lag study. CWS provided the new lead/lag study with the workpapers during this GRC application. DRA reviewed the new lead/lag study and noted that it is comprehensive and well-documented.

CWS produced a lead/lag calculation of working cash that indicates a positive working cash allowance of \$164,400 for Test Year 2007-2008 and \$172,100 for Escalation Year 2008-2009. DRA disagreed with some of the lag days included in the CWS calculation and recommended some adjustments to CWS' lead/lag calculation and the estimated working cash allowance. DRA recommends positive working cash allowance of \$136,100 for Test Year 2007-2008 and \$146,500 for Escalation Year 2008-2009.

DRA estimates different lag days than CWS for several of the CWS expenses such as ad valorem taxes, state corporation franchise tax, and federal income tax. DRA calculated the average lag days for ad valorem taxes at 70.5 days instead of the 41 days estimated by CWS. DRA estimated the lag days for State corporation franchise tax and federal income tax to be 93 days. In D.03-09-021 which determined General Office expenditures, CWS and DRA agreed that 93

lag days fairly represents the timing and amount of taxes paid²⁵. DRA recommends using 93 days rather than the 37.0 days and 40.9 days, respectively, estimated by CWS.

3) Net to Gross Multiplier

The net-to-gross multiplier represents the change in gross revenue required to produce a unit change in net revenue. DRA recommends that the net-to-gross multipliers shown in the table below be applied in developing the revenue requirement change calculation for the Test Year 2007-2008. CWS and DRA used the same methodology to calculate the net-to-gross multiplier.

Table 9-B
California Water Service Company
Oroville District
Net to Gross Multipliers

DRA Net to Gross Multiplier	CWS Net to Gross Multiplier
1.79311	1.79311

²⁵ CPUC Decision 03-09-021, dated September 4, 2003, paragraph 4.03

TABLE 9-1

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

WEIGHTED AVERAGE DEPRECIATED RATE BASE

TEST YEAR 2007 - 2008

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Serv.	12,670.0	13,702.5	1,032.5	8.1%
Materials & Supplies	55.0	55.0	0.0	0.0%
Working Cash - Lead-Lag	136.1	164.4	28.3	20.8%
Amt withheld from Employees	(0.9)	(0.9)	0.0	0.0%
Wtd. Avg. Depr. Res.	(4,945.7)	(4,961.6)	(15.9)	0.3%
Advances	103.5	103.5	0.0	0.0%
Contributions	676.9	676.9	0.0	0.0%
Reserved Amort.Intangibles	14.5	14.5	0.0	0.0%
Deferred Taxes	770.9	770.9	0.0	0.0%
Unamortized ITC	30.7	30.7	0.0	0.0%
General Office Alloc	254.3	254.3	0.0	0.0%
Taxes on - Advances	9.9	9.9	0.0	0.0%
Taxes on - CIAC	77.5	77.5	0.0	0.0%
Average Rate Base	6,659.6	7,704.6	1,045.0	15.7%
Interest Calculation:				
Avg Rate Base less work cash	6,659.6	7,486.1	826.5	12.4%
x Weighted Cost of Debt	2.89%	2.89%	0.00%	0%
Interest Expense	192.5	216.3	23.9	12.4%
less Cap. Interest	(11.1)	(22.5)	(11.4)	102.5%
Net Interest Expense	181.4	193.8	12.5	6.9%

TABLE 9-2

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

WEIGHTED AVERAGE DEPRECIATED RATE BASE

ESCALATION YEAR 2008 - 2009

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Service	13,015.8	14,498.5	1,482.7	11.4%
Material & Supplies	55.0	55.0	0.0	0.0%
Working Cash - Lead-Lag	146.5	172.1	25.6	17.5%
Amt withheld from Employees	(0.9)	(0.9)	0.0	0.0%
Wtd. Avg. Depr. Reserve	(5,258.9)	(5,306.6)	(47.7)	0.9%
Advances	99.4	99.4	0.0	0.0%
Contributions	668.4	668.4	0.0	0.0%
Reserved Amort.Intangibles	16.5	16.5	0.0	0.0%
Deferred Taxes	796.0	796.0	0.0	0.0%
Unamortized ITC	29.2	29.2	0.0	0.0%
General Office Alloc	262.6	262.6	0.0	0.0%
Taxes on - Advances	9.4	9.4	0.0	0.0%
Taxes on - CIAC	85.6	85.6	0.0	0.0%
Average Rate Base	6,705.6	8,166.2	1,460.6	21.8%
Interest Calculation:				
Avg Rate Base less work cash	6,705.6	7,940.0	1,234.4	18.4%
x Weighted Cost of Debt	2.89%	2.89%	0.00%	0.0%
Interest Expense	193.8	229.5	35.7	18.4%
less Cap. Interest	(7.1)	(8.0)	(0.9)	12.5%
Net Interest Expense	186.7	221.5	34.8	18.6%

TABLE 9-3

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

NET-TO-GROSS MULTIPLIER

TEST YEAR 2007 - 2008
AND ESCALATION YEAR 2008 - 2009

Item	DRA	CWS
1) Uncollectibles %	0.69629%	0.69629%
2) 1-Uncoll (100%-line 1)	99.30371%	99.30371%
3) Franchise tax rate	0.00000%	0.00000%
4) Local Franchise (line 3*line 2)	0.00000%	0.00000%
5) Business license rate	0.00000%	0.00000%
6) Business license (line 5*line 2)	0.00000%	0.00000%
7) Subtotal (line 1+line 4+line 6)	0.69629%	0.69629%
8) 1-Subtotal (100%-line7)	99.30371%	99.30371%
9) CCFT (line 8 * 8.84%)	8.77845%	8.77845%
10) FIT (line 8 * 35%)	34.75630%	34.75630%
11) Total taxes paid (ln 7+ln 9+ln 10)	44.23104%	44.23104%
12) Net after taxes (1-line 11)	55.76896%	55.76896%

	Net-to-Gross Multiplier (1/line 12) =	1.79311 (DRA)
1	Net-to-Gross Multiplier (1/line 12) =	1.79311 (Utility)

1 **CHAPTER 10: CUSTOMER SERVICE**

2 **A. INTRODUCTION**

3 This chapter presents DRA’s analyses and recommendations on customer
4 service.

5 **B. SUMMARY OF RECOMMENDATIONS**

6 DRA finds the numbers of service complaints low and customer service in
7 this district satisfactory after reviewing CWS’ filings and responses to DRA data
8 requests.

9 **C. DISCUSSION**

10 Table 10A presents a summary of CWS customer service complaints
11 received from 2001 through 2006 by type. It also contains the number of
12 complaints as a percentage of the total number of customers in the Oroville
13 district.

Table 10-A
Oroville District Customer Service Complaints

<u>Type</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006*</u>
Taste and Odor	0	7	2	4	2	0
Color	0	0	0	7	8	4
Turbidity	0	8	5	0	0	2
Worms/Other Objects	0	0	0	0	0	0
Pressure	0	0	4	0	0	8
Illness-Waterborne	0	0	0	0	0	0
Air	0	3	0	0	0	1
Leaks	0	1	0	2	0	0
Other	0	0	1	0	0	0
Total	0	19	12	13	10	15
No. of Customers	3,492	3,508	3,523	3,533	3,555	3,592
Total as % of Customers	0.00%	0.54%	0.34%	0.37%	0.28%	0.42%

1 *Up to October 2006

2 CWS' records indicate that the numbers of service complaints are low
3 relative to the number of customers in the district.

4 **D. CONCLUSION**

5 DRA recommend that the Commission finds CWS' customer service to be
6 satisfactory.

CHAPTER 11: RATE DESIGN

A. INTRODUCTION

This Chapter sets forth DRA's analysis and recommendations on rate design for CWS' rate increase application for its Oroville District. The present rates for General Metered Service and for Residential Flat Rate Service used by CWS in their application became effective on January 1, 2006. The present rates for Irrigation Service, Interruptible Irrigation Service and Limited Flat Rate Service used by CWS in their application became effective on January 1, 2006. The present rates for Service to Privately Owned Fire Protection became effective on January 1, 1999. The proposed rates are those found in CWS' workpapers.

CWS currently provides water service in its Oroville District under the following schedules:

OR-1	General Metered Service
OR-2R	Residential Flat Rate Service
OR-3M	Irrigation Service
OR-3M-I	Interruptible Irrigation Service
OR-2UL	Limited Flat Rate Service
OR-4	Service to Privately Owned Fire Protection

B. SUMMARY OF RECOMMENDATIONS

CWS proposes to design rates for General Metered Service to recover 50 percent of the fixed costs through the service charge and the remainder through increasing quantity rates. The method for General Metered Service meets the requirements set forth in Decision D.86-05-064. CWS proposes to use the Service Charge ratios from CWS' 1991 general rate case filings. DRA does not object to

1 these ratios. However, DRA's proposed rates differ from CWS' because of
2 different recommended revenue requirements.

3 CWS' other rate change request involves implementation of a tiered rate
4 structure (increasing block rates) along with a Water Revenue Adjustment
5 Mechanism (WRAM) and Full Cost Balancing Accounts (FCBA). DRA prepared
6 its analysis of rate design with the understanding that CWS' current GRC would
7 be divided into two phases with the second phase addressing CWS' requests for
8 increasing block rates, WRAM and FCBA. CWS subsequently submitted a
9 compliance filing A.06-10-026, requesting the Commission to address these
10 issues. CWS submitted its compliance filing on October 26, 2006. Consequently,
11 in this report, DRA addresses rate design from CWS' approved rate design and
12 defers addressing increasing block rates, WRAM and FCBA to the compliance
13 filing. Thus, in DRA's analysis of CWS' proposal, DRA continues to assume the
14 absence of WRAM and FCBA and a rate design that recovers 50 percent of the
15 fixed costs through the service charge and the remainder through a single quantity
16 rate.

17 **C. DISCUSSION**

18 Concerning Privately Owned Fire Protection Service, CWS proposes to
19 continue charging for Privately Owned Fire Protection Service according to the
20 size of the connection. DRA finds this approach reasonable because the proposed
21 rates are consistent with rates approved for other CWS' districts. DRA's proposed
22 rates will differ from CWS' because DRA recommends a different revenue
23 requirement.

24 **D. CONCLUSION**

25 As the vast majority of CWS' proposed rate design will be addressed in the
26 compliance filing, DRA concludes that for this general rate case, it would be

1 prudent for the Commission to adopt the CWS rate design from its last GRC.
2 Notwithstanding the deferral of WRAM and FCBA to the compliance filing, the
3 adopted rates will differ from CWS' because DRA recommends a different
4 revenue requirement. DRA recommends the Commission adopt rates for CWS
5 based on DRA's revenue requirement.

CHAPTER 12: SPECIAL REQUESTS

A. INTRODUCTION

This Chapter presents DRA's analysis and recommendations on the special requests made by CWS for the Oroville District.

B. SUMMARY OF RECOMMENDATIONS

(a) **CWS requests a finding from the Commission that the district provides water service that meets or exceeds state and federal drinking water standards and General Order 103 (Exhibit F, page 2).**

DRA evaluated water quality issues by reviewing CWS testimony written by Chet Auckly, Director of Water Quality and Environmental Affairs, reviewing annual inspections reports and water quality reports, and consulting with Sanitary Engineers of the Department of Health Services Drinking Water Field Operations (DHS). DHS confirmed that the last Public Water System Annual Inspection of Oroville District was May 5, 2006. During April 2006, the system fluoride level dropped below the control range on several occasions. However, these incidences did not involve exceeding a maximum contaminant level, they were corrected, and they did not pose a risk to the public. DHS has not cited the district during the time period that has passed since the last GRC in 2003.

According to DHS, Oroville District is meeting the applicable federal and state drinking water standards. DHS did not have other noteworthy issues or concerns regarding water supply or water storage capacity, water quality or compliance with regulations at this district other than comments noted in the last inspection report. The Overall System Appraisal in the DHS annual inspection report stated:

“Cal Water Oroville operates the water system in a professional and competent manner. Staff are

1 knowledgeable, forthcoming with information, and are
2 not hesitant to ask questions. The treatment plant and
3 well houses were found to be in a very good, clean,
4 and uncluttered condition²⁶”.

5 **(b) The Water Revenue Adjustment Mechanism request is**
6 **excluded from the scope of this proceeding.**

7 **(c) The offset rate increase to reflect General Office allocation**
8 **request is excluded from the scope of this proceeding.**

9 **(d) CWS requested a change from an incremental cost balancing**
10 **account to a total water cost balancing account to track the water supply mix**
11 **changes among its groundwater and purchased water supplies. This request is**
12 **excluded from the scope of this proceeding.**

13 **(e) CWS is requesting amortization of balancing and**
14 **memorandum accounts as ordered in D.06-04-037.**

15 As of June 30, 2006 the balancing accounts included in CWS’
16 Exhibit I show an over collection of \$19,442 or 0.79% of the annual revenue.
17 DRA reviewed and agreed that the balancing account should be amortized.

18 Ordering paragraph 3 of D. 06-04-037 states that, “Class A water
19 utilities shall report on the status of their balancing accounts in their general rate
20 cases and shall propose adjustments to their rates in that context to amortize
21 under-or over-collections in those accounts subject to a reasonableness review.
22 They also may propose such rate adjustments by advice letter at any time that the
23 under-or over-collection in any such account exceeds two percent (2%) of annual
24 revenues for the utility or a ratemaking district of the utility.”

²⁶ California Department of Health Services, Division of Drinking Water and Environmental Management, Annual Inspection Report dated December 28, 2004, page 10, paragraph I.

- 1 CWS' request to amortize its purchased water and purchased power
- 2 balancing accounts is in compliance with ordering paragraph 3 of D. 06-04-037.

CHAPTER 13: STEP RATE INCREASE

A. FIRST ESCALATION YEAR

On or after November 5, 2007, CWS should be authorized to file an advice letter, with appropriate supporting work papers, requesting the step rate increase for 2008 authorized by the Commission, or to file a lesser increase in the event that the rate of return on rate base, adjusted to reflect the rates then in effect and normal ratemaking adjustments for the 12 months ending September 30, 2007, exceeds the lesser of (a) the rate of return found reasonable by the Commission for CWS for the corresponding period in the most recent rate decision, or (b) the rate of return found reasonable in this case. This filing should comply with General Order 96-A. The requested step rates should be reviewed by the Commission's Water Division (Division) to determine their conformity with this order, and should go into effect upon the Division's determination of compliance. The Division should inform the Commission if it finds that the proposed rates are not in accord with this decision, and the Commission may then modify the increase. The effective date of the revised tariff schedule should be no earlier than 30 days after filing. The revised schedules should apply to service rendered on and after their effective date. Should a rate decrease be in order, the rates should become effective on the filing date.

B. SECOND ESCALATION YEAR

For the second year an attrition adjustment should be granted for the revenue requirement increases attributable for the expense increases due to inflation and rate base increases that are not offset by the increases in revenues, with the revenue change to be calculated by multiplying forecasted inflation rate by DRA and operational attrition plus financial attrition times adopted rate base in 2008 times the net-to-gross multiplier.

C. ESCALATION YEARS INCREASES

The table below shows the Summaries of Earnings for Escalation Years 2008-2009 and 2009-2010. To obtain the increases in these years, D. 04-06-018 requires water

utilities to file an Advice Letter 45 days prior to the start of the year showing all calculations supporting their requested increases.

The revenues shown in Table 13-1 are for illustration purposes and the actual increases would be authorized only after approval of the utility's advice letter.

TABLE 13-1

SUMMARY OF EARNINGS

CALIFORNIA WATER SERVICE COMPANY
OROVILLE DISTRICT

	DRA	DRA		
	2008-09	2009-010	% increase	
Item	(Thousands of \$)			
Operating revenues	3,029.3	3,073.2	1.4%	Esc. Factor
Operation & Maintenance	1,109.3	1,128.1	1.7%	1.017
Administrative & General	157.0	159.8	1.8%	1.018
G.O. Prorated Expense	472.0	480.0	1.7%	1.017
Depreciation & Amortization	337.7	343.4	1.7%	1.017
Taxes other than income	97.7	99.4	1.7%	1.017
State Corp. Franchise Tax	56.3	56.9	1.1%	
Federal Income Tax	242.8	245.1	1.0%	
Total operating expenses	2,472.7	2,512.8	1.6%	
Net operating revenue	556.6	560.4	0.7%	
Rate base	6,705.6	6,751.5	0.7%	
Return on rate base	8.30%	8.30%	0.0%	

APPENDIX A

QUALIFICATIONS AND PREPARED TESTIMONY

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
YOKE W. CHAN**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Yoke W. Chan and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Senior Utilities Engineer in the Water Branch of the Office of Ratepayer Advocates.

Q2. Please summarize your education background.

A2. I graduated from the University of California at Los Angeles, with a Bachelor of Science Degree in Civil Engineering. I am a registered civil engineer in the State of California.

Q3. Briefly describe your educational background and professional experience.

A3. I have been employed by the Commission for many years and have testified and worked on many general rate case proceedings, offset rate cases, transfer and compliance matters of large water utilities. I have also worked on ECAC proceedings for the energy utilities.

Q4. What is your responsibility in this proceeding?

A4. I am the Project Manager for this proceeding and responsible for Chapters 1 and 13 of DRA's Reports on the Results of Operations for Bakersfield, Dixon, King City, Oroville, Selma, South San Francisco, Westlake and Willows districts.

Q5. Does this conclude your prepared direct testimony?

A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
TONI CANOVA**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Toni Canova and my business address is 505 Van Ness Avenue, San Francisco, California. I am in the Water Branch of the Division of Ratepayer Advocates as a Public Utility Regulatory Analyst IV.

Q2. Please summarize your education background and professional experience.

A2. I graduated from The Evergreen State College in Olympia, Washington, with a Bachelor of Arts Degree in Environmental Studies. I have been employed by the Commission for three years. Previously, I was employed by the Department of Ecology's Water Quality Program for the State of Washington.

Q3. What is your responsibility in this proceeding?

A3. I am responsible for Result of Operation tables for Bakersfield, King City, and Selma Districts, Chapter 2 testimony, Water Consumption and Operating Revenues, for all eight districts, and the Selma district Special Request (F) for Phase-in revenue requirement.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
VIBERT GREENE**

Q.1. Please state your name and address.

A.1. My name is Vibert Greene. My business address is 505 Van Ness Avenue, San Francisco, California.

Q.2. By whom are you employed and in what capacity?

A.2. I am employed by the California Public Utilities Commission as a Utilities Engineer in the Division of Ratepayer Advocates Water Branch.

Q.3. Please briefly describe your educational background and work experiences.

A.3. I have a: Ph D in research in Pressure Driven Ultra-filtration and Master of Engineering at the University of California, Berkeley; Masters of Science in Engineering from San Jose University; Bachelor of Science in Mechanical Engineering and Bachelor of Arts in Mathematics from the University of Hawaii, Honolulu. I also completed Management training at Leigh University. I attended both the NARUC Western Utility Rate School Seminar in the basics of utility ratemaking for regulated entities and the National Regulatory Research Institute Seminar on Public Utility Regulation in the 21st Century.

After graduation from Berkeley, I joined the California Public Utilities Commission. I am presently employed as a Utilities Engineer in the Ratepayer Representation Branch of the Water Division dealing with class A Water Utilities. Since joining the Commission in 1998 as a Utilities Engineer, I have worked on several Class A, B and C Water Utilities' Rate Cases. My duties and responsibilities covered all aspect of a Rate Case including but not limited to: Rate Design, Rate Base, Operation and Maintenance Expenses, Taxes-General, Administration and General Office Expenses, Depreciation, Revenues and Utility Plant in Service. In addition, I have worked on several formal proceedings including evaluation studies and other investigations initiated by the Commission. My duties and responsibilities also require participation in Public Hearings, giving expert testimony before the Commission, conducting Field Audits of Utilities Plant and writing Reports.

Prior to joining the Commission, I worked in the private sector for 20 plus years. My work experiences included several years in Design Engineering, Process Engineering, Research and Development, Program Management and Project management. I have managed several special projects; including several years Project Management experience--managing projects for an International Consortium which consisted of Companies from Japan, Italy and France. Five years Program Management as the Test Director for a National Consortium which consisted of five-agencies located in three States. I am also a part-time Mathematics instructor at the Evergreen College in San Jose, and hold two mechanical device patents.

Q.4. What is your area of responsibility in this proceeding?

A.4. In the Results of Operations I am responsible for a preparing Chapter 3—Operation and Maintenance, and Chapter 6—Income Taxes.

Q.5. Does that complete your prepared testimony?

A.5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
CLEASON D. WILLIS**

Q.1. Please state your name and business address.

A.1. My name is Cleason D. Willis. My business address is 505 Van Ness Avenue, San Francisco, California, 94102.

Q.2. By whom are you employed and in what capacity?

A.2. I am employed by the California Public Utilities Commission as a Regulatory Analyst.

Q.3. Please briefly describe your educational background and work experience.

A.3. I graduated from the California State University of Hayward with a Bachelor of Science Degree in Business Administration and Finance, and a Master of Science Degree in Public Administration and Management. After graduation I joined the California Public Utilities Commission. Since that time I have performed economic, and reasonableness analysis for various Electrical, Gas, Water, and Telecommunications operations. I have written reports, and testified regarding the validity of my findings and recommendations concerning my analysis for various utility proceedings.

Q.4. What is your area of responsibility in this proceeding?

A.4. I am responsible for the Administration and General Expenses, and Taxes Other Than Income chapters for the California Water Service Company General Rate Case.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
JOYCE W. STEINGASS, P.E**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Joyce W. Steingass. My business address is 505 Van Ness Avenue, San Francisco, California. My job title is Utilities Engineer and I work in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background and professional experience.

A2. I am a graduate of the University of California, Berkeley, with a Bachelor of Science in Mechanical Engineering. I am a licensed professional Mechanical Engineer in the State of California. I have been employed by the California Public Utilities Commission since 2005. My current assignment is within the Division of Ratepayer Advocates where I work on Class A General Rate Cases. Prior to joining CPUC, I was a management consultant at Barrington-Wellesley Group, performing investigations of energy companies for regulatory Commissions in other states. Before that I was a utility consultant for Navigant Consulting. Earlier in my career, I was employed by Pacific Gas and Electric Company for seventeen years where my most recent position was the Director of Distribution Quality Assurance, in charge of audits related to gas and electric distribution operations. During my career with PG&E, I was the Pipeline Replacement Superintendent for PG&E's San Francisco Division for three years. That project entailed overseeing the replacement of cast iron and pre-1930s steel natural gas distribution pipelines.

Q3. What is your responsibility in this proceeding?

A3. I am the witness responsible for Utility Plant in Service and Depreciation Expenses and Reserve. I prepared the following chapters of DRA's report:

- Chapter 7 – Plant in Service for Dixon, Oroville and Willows Districts
- Chapter 8 – Depreciation Expenses and Reserve
- Chapter 9 – Rate Base and Net to Gross Multiplier;
- Chapter 12 – Special Requests related to Water Quality in Dixon, Oroville and Willows Districts and Well Refurbishment in King City and Willows Districts.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
KATIE LIU**

Q.1. Please state your name and business address.

A.1. My name is Katie Liu. My business address is 505 Van Ness Avenue, San Francisco, California.

Q.2. By whom are you employed and in what capacity?

A.2. I am employed by the California Public Utilities Commission - DRA Water Branch – as a Public Utilities Regulatory Analyst.

Q.3. Please briefly describe your educational background and work experience.

A.3. I am a graduate of the University of California, Los Angeles with a Bachelor's degree in Economics. I have been employed by the California Public Utilities Commission since 2006. My current assignment is within DRA – Water where I work on Class A General Rate Cases.

Q.4. What are your responsibilities in this proceeding?

A.4. I am responsible for DRA's Water Branch Report On Customer Service For California Water Service Company in this proceeding.

Q.5. Does this conclude your prepared testimony?

A.5. Yes.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
TATIANA OLEA**

Q. Please state your name and business address.

A. My name is Tatiana Olea. My business address is 505 Van Ness Avenue, San Francisco, California 94102.

Q. By whom, and in what capacity are you employed?

A. I am employed by the Public Utilities Commission of California (CPUC) as a Public Utilities Regulatory Analyst (PURA) IV in the Division of Ratepayer Advocates, Water Branch.

Q. Please summarize your educational background and work experience.

A. In 1998, I completed a graduate program at Syracuse University where I received a master in Public Administration with a concentration in Public Finance from the Maxwell School. My undergraduate degree is in Anthropology and Sociology from Saint Mary's College in Moraga, California. After completing graduate school, I joined the government practice of PriceWaterhouse (now PriceWaterhouseCoopers) and later worked as an analyst for the Federal Reserve Bank of San Francisco. After the Federal Reserve, I returned to consulting with Bartle Wells Associates of Berkeley, CA., where I specialized in water and sewer rate design and revenue bond financing. Since leaving the Federal Reserve in 2001, I have worked on consulting assignments with public agencies, engineers, and other professionals to evaluate financing alternatives for public projects.

My experience includes extensive rate design and financing work for municipal water and sewer utilities. I have developed water, sewer, and recycled water rate structures including designing tiered rate structures. I prepared long-range financial plans for utilities and prepared preliminary official statements and related documents for municipal bond sales. Last year, I served as Senior Analyst in two utility revenue bond financings totaling over \$115 million. I have also developed and implemented development impact fees and user charges.

In municipal rate design cases, I served as expert witness and testified in front of governing bodies during public hearings approximately 20 times.

I joined the staff of the CPUC in September of this year. My current assignments include rate cases, evaluation of tiered rates and analyzing the impact of decoupling (WRAM). I am project lead for the current California Water Services Company compliance filing and I am sponsoring rate design testimony in the CalAm GRC.

Q. What is the purpose of your testimony today?

A. I am sponsoring Chapter 11, Rate Design, of the DRA's Report on CWS' GRC.

Q. Does that complete your prepared direct testimony in this proceeding?

A. Yes, at this time.